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# HIGH TIMES

DECEMBER 1989

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INDOOR  
GARDENING:**  
High Yield in Small Spaces

**FRANK ZAPPA  
INTERVIEW:**  
The Original Mother Mouths OFF

**THC and the BRAIN**







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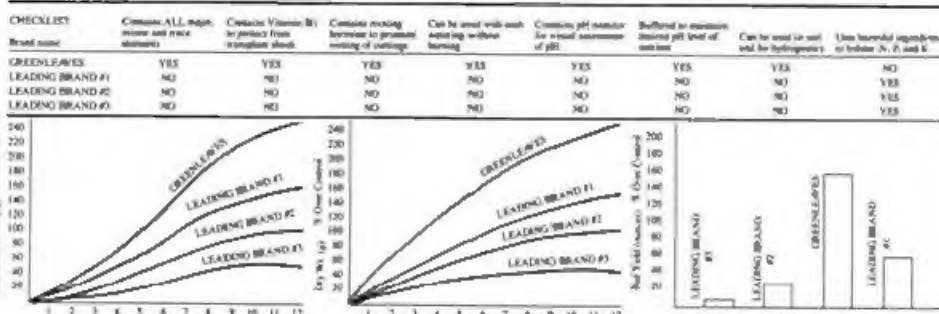


FIGURE 1. Effect of various hydroponic nutrients on protein synthesis in tomato plants. [Control plants were treated with a fertilizer containing only N, P, and K.]

FIGURE 2. Effect of various hydroponic systems on the dry weight of tomato plants. [Control plants as in Fig. 1.]

FIGURE 3. Effect of various hydroponic systems on bud yield in tomato plants. Plants treated with GREENLEAVES were fed Grow Juice for 4 weeks and Bloom Juice thereafter. [Control plants as in Fig. 1.]



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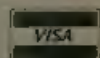
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On the cover (clockwise from top right):  
 Frank Zappa (photograph by Lynn Goldsmith);  
 THC and the Brain (illustration by Brian Spaeth,  
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 Indoor Organic Growing (photograph by Daryl).

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# HIGH TIMES

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# PAGE SIX

Mr. William Bennett  
Office of National  
Drug Control Policy  
Executive Office of  
the President  
Washington, DC 20500

August 29, 1989

Dear Mr. Bennett:

Having read an advance copy of your 1989 drug report, I'd like to let you know that I agree wholeheartedly with your efforts to dismantle the international drug cartels. Fighting such a powerful foe will certainly require all the resources you can muster.

For this reason, I feel it is a mistake to escalate the war on cannabis consumers. Pot smokers represent nearly a quarter of the US population and do not represent any threat to society. For the most part, we are patriotic, peaceful, law-abiding citizens who have been criminalized by an unjust law. Since we are well aware that marijuana is safer than alcohol or tobacco, it is unlikely we will ever be defeated by governmental oppression. In fact, history has shown that repression aimed at us only serves to heighten the cannabis protest movement, at the moment a sleeping giant, but with over 20 million potential members.

Instead of waking the angry giant, I'm hoping you'll use your position to open a dialogue with us. As editor-in-chief of the only national magazine serving the marijuana community, I'd like to discuss a peace plan with you. We are eager to make any compromises necessary to lift the cloak of repression off our shoulders. One possible solution is to decriminalize personal-use growers and allow them access to homegrown cannabis as long as they confine their use to the boundaries of their own property. This system has worked well in Alaska for ten years.

I'm hoping we can discuss a range of options, while dispelling your fear of cannabis--the most versatile, fastest-growing biomass on the planet. I'd like to discuss the environmental benefits of legalizing hemp for fuel, food, fiber, and paper. We are not your enemy. Please invest a little time in trying to understand our point of view. All we want is peace.

Sincerely yours,

*Steven Hager*

Steven Hager  
Editor-in-Chief

# A MESSAGE FROM ED ROSENTHAL

FAMOUS AUTHOR AND GROWING EXPERT



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**Dear Readers;**

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It measures only 16" x 24", sets up in just five minutes and needs hardly any main-



*"The Liz's Garden they produced is the simplest, easiest and quickest home garden that I've ever tried!"*

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*Ed*

Ed Rosenthal

**P.S** To top it all off, I suggest you use a quality Hydrofarm mini-horizontal to light your Liz's Garden.

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Waterbeds & Stuff (614) 276-4722  
3788 W. Broad St., Columbus, OH 43228  
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**Now!**  
The only **UL** listed  
Grow Light Systems  
on the market!

**Dear Customers:**

Thanks to you, our Grow Wing and Sunburst grow lights are the most popular lights in use today. Now, we've set a whole new standard for performance and quality with our new **UL SERIES** of grow lights.

We've made our new Super Grow wing reflector **20% larger** to cover more area with the **highest intensity** uniform light pattern ever offered! The UL SERIES also incorporates a UL-required tempered glass lens and is constructed out of strong steel (not thin aluminum).

Don't be fooled by others that claim to use UL components (any electrical plug is a UL component). This is **not** the same thing as having the **entire** system UL listed. Only HYDROFARM - UL SERIES lights have been professionally tested and are listed by UL (Underwriters Laboratories), the world-famous electrical and safety testing organization.

We continue to offer our top quality UL listed ballast assembly with all our lights, and of course, our often limited **Safety-First** wiring system.

We will continue to offer you only the best quality growing equipment, and our being the **first** company in the market to offer UL listed grow lights says how we feel about this commitment.

Thank you for your confidence in us.

**Applied Hydroponics, Inc.**  
Makers of Hydrofarm Indoor  
Gardening products

**BETTER DESIGNED - BETTER BUILT**

**HYDROFARM LIGHT TRACK™**

- Hang horizontal or vertical lights
- No-drip motor; lifetime lubrication
- Heavy-duty four wheel carrier
- Full five year guarantee

**OTHERS**

- Hang vertical lights only
- Motor drips; needs oiling
- Weak one wheel carrier
- One year guarantee only



**NEW!**

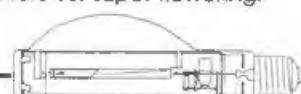
**THE HYDROFARM LIGHT TRACK™**

**FASTER! 20% more laps per light cycle.**

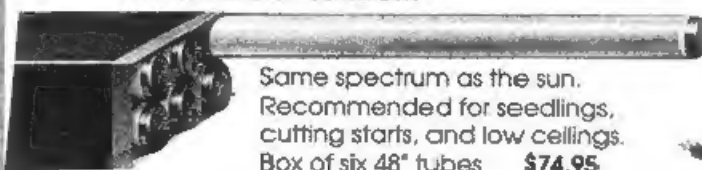
6' Ft. System **\$99.95**  
6' Ft. Extension **\$39.95**

**SODIUM CONVERSION BULBS**

Simply screw one into your halide fixture for super flowering!



**CYLINDERS OF SUNLIGHT™**



Same spectrum as the sun.  
Recommended for seedlings,  
cutting starts, and low ceilings.  
Box of six 48" tubes **\$74.95**

940 watt - for 1000 halide **\$137.95**  
360 watt - for 400 halide **\$67.95**  
220 watt - for 250 halide **\$67.95**  
150 watt - for 175 halide **\$67.95**

**HYDROFARM CO<sub>2</sub> SYSTEM**

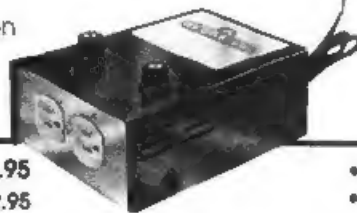


- Fertilize the air
- Double growth and flowering
- Unique programmable timing

**\$149.95**

**CLIMATE CONTROLLER**

Automatically activates fans on  
humidity or temperature rise!



**Climate Controller** **\$69.95**  
Temperature Controller only **\$39.95**  
Humidity Controller only **\$39.95**

**Additional grower-proven Hydrofarm products available:**

Hydrofarm Grow Nutrient 1lb.	\$12.00	Aspenair Ionizer	\$49.95	45" Vertical Reflectors - no extra charge	
Hydrofarm Bloom Nutrient 1lb.	12.00	Hydrofarm Air Cleaner	99.95	Whirligig 2 - Arm	\$129.95
Cutting Concentrate 2 oz.	7.95	Turbo Air Cleaner	319.95	Sun Circle 1 - Arm	139.95
Cutting Starter Kit	19.95	Vent Fan 140 CFM	44.95	Sun Circle 2 - Arm	199.95
Digital pH Pen Package	59.95	Vent Fan 265 CFM	69.95	Sun Circle 3 - Arm	259.95
Hydrofarm pH Lower 16 oz.	7.95	Vent Fan 465 CFM	89.95	Hydrofarm Light Meter	29.95
Hydrofarm pH Raise 16 oz.	7.95	Wall Mount Osc. Fan	59.95	Rockwool-PLUS MUCH MORE!	
Geolite 5 Gallon Bag	14.95	Mylar 4' x 50' Roll	39.95	*All prices plus shipping	



**NEW!**  
**SUPER GROW WING**  
**-UL SERIES™**

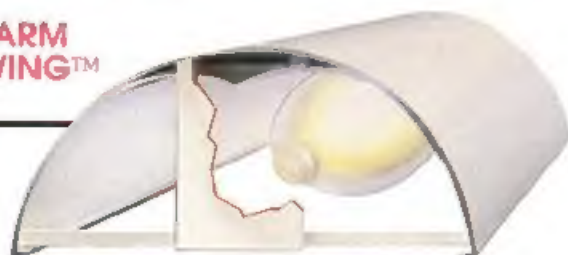


# Grow With The Best!

**HYDROFARM GROW WING™**  
(pat. pend.)



**BALLAST:**  
Double-wall steel construction, front and rear bi-level louvers (included with all Grow Wing and Super Grow Wing Systems).



**Delivers more light intensity than any other reflector in its class!**

- Horizontal system with double parabola design
- Electro-white finish • Strong steel construction
- Safety-First wiring system • High output super bulbs

**SUPER GROW WING-UL SERIES LIGHTING SYSTEMS**

1000 Halide	\$249.95	1000 Sodium	\$319.95
400 Halide	\$199.95	400 Sodium	\$239.95

**GROW WING LIGHTING SYSTEMS**

1000 Halide	\$199.95	1000 Sodium	\$264.95
400 Halide	\$149.95	400 Sodium	\$189.95

**HYDROFARM SUNBURST™**

- Horizontal efficiency
- Built-in ballast
- Electro-white finish
- Ready to plug in



150 Sodium	\$109.95
175 Halide	\$109.95
250 Halide	\$129.95
*UL Required lens package - add \$20.00	

**HYDROFARM QUANTUM™** (pat. pend.)

**Never before has peak performance been offered in such a reliable, easy-to-use system • More Quantums in use today than all other hydroponic systems combined!**

- Rockwool medium • Multi-ridge irrigation and aeration system • Grow 20 full-size plants, hundreds of cuttings, or up to 600 starts!
- ✓ Options: Ebb & Flow, Slab, Geolite, and add-on tray packages available.

**Nothing extra to buy or build!**

**Systems include:**

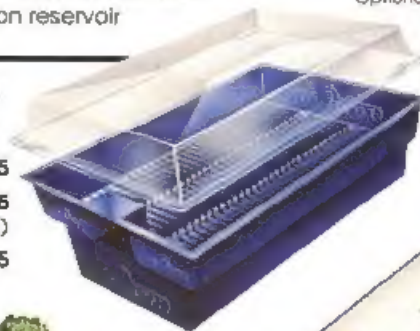
Trays, stands, 25 gallon reservoir, cover, pump, irrigation system, Rockwool cubes, nutrients and instructions

**NEW! HYDROFARM EBB & FLOW SYSTEM**

**The ease of Ebb & Flow irrigation manufactured in the rugged and durable tradition of Applied Hydroponics.**

- Holds up to 56 large Rockwool cubes, 450 starter cubes or 3 slabs. • Solid construction - 50% thicker than ordinary trays • Large 25 gallon reservoir

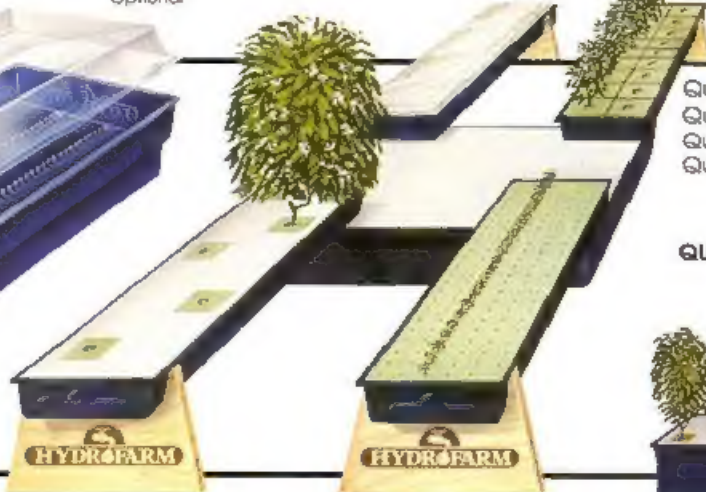
Super Dome™  
Optional



**System comes complete with:**  
Tray, reservoir, pump, timer, nutrients, Rockwool cubes, fittings and instructions. **\$189.95**

**Ebb & Flow Tray Only \$49.95**  
(42" x 26" x 6"-fittings included)

**Super Dome™ Cover \$44.95**  
Makes a 14' tall greenhouse.



Quantum Four Tray	\$199.95
Quantum Six Tray	\$259.95
Quantum Eight Tray	\$319.95
Quantum Ten Tray	\$379.95

**QUANTUM TWO TRAY \$179.95**



**NEW! LIZ'S GARDEN™**

- ☆ Designed and recommended by **Ed Rosenthal**, famous author and growing expert
- ☆ Proven! Featured in his six-part magazine series, 1989
- ☆ Compact - measures just 16" x 24"
- ☆ Just add seeds and water! **\$49.95**

**Only Applied Hydroponics offers:**

- ✓ Factories (with showrooms) on both coasts
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CA & PA residents add 6% sales tax. All prices plus shipping.



## MAX-89 "THE ULTIMATE HORIZONTAL"

89% increase in light output

Double Arc, low profile, adjustable, electro-white ▼



Remember MAX 89 is the only double arc reflector that gives you what no other lighting manufacturer offers:

- Maximum reflection, with mill bonded super electro-white glass finish (not spray painted electro-white).
- Quality aluminum construction, light weight, rust proof, with maximum heat dissipation (not heavy, rusty steel).

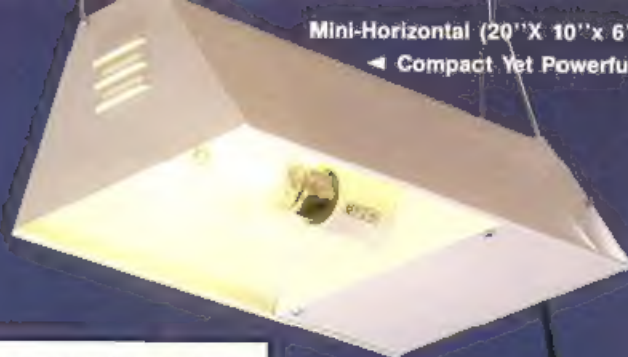
Heavy Duty Ballast ▶  
With 38 cooling louvers



Compare Quality & Price  
you are saving 5% to 40%

Mini-Horizontal (20"X 10"X 6")

◀ Compact Yet Powerful



CO<sub>2</sub> Enrichment System

# TO STAY #1 IN GROW LIGHTS FOR TWO CONSECUTIVE YEARS, YOU HAVE TO BE HAMILTON\*

*\*Only Hamilton's Horizontal Lighting Systems were exhibited at the Hydroponic Society of America 1988 & 1989 Conventions.*

## A good grow light is the key to your indoor growing success

It is well known that Metal Halide and High Pressure Sodium full spectrum are the best lights to promote good plant growth and to increase bud and flower production.

### How to get maximum light output

Hamilton has perfected the ultimate horizontal reflector: **Max 89**. The unique double arc "v" design and the super reflective finish of Max 89 give a remarkable 89% increase in light output over vertical mounted lights. It is not possible to design a reflector that can give more light than Max 89. Its ventilation design assures a longer bulb life. Every Max 89 has an adjustment feature which allows you to regulate light to meet the requirements of your growing area with either more concentrated or more diffused light. Max 89 has a low profile design that actually leaves more vertical space for plant growth.

### Percentage of light output increase

Hamilton Technology	89%
Max 89	
Hamilton Technology	68%
Mini-Horizontal	

### Better safe than sorry

Many poorly designed lighting systems become fire hazards with increased use. Hamilton's UL approved heavy-duty, high temperature resistant lamp cords are not only 220° F./600 volt but have an "STO" safety and durability rating. For utmost safety, lamp cords are connected 4" away from the socket in a protective junction box to prevent fire from lamp heat build up.

### NEW! Mini-Professional Systems:

The most powerful minis on the market  
**MH250 Pro System** (Reg. \$149<sup>99</sup>) **\$119.<sup>99</sup>**  
**HPS250 Pro System** (Reg. \$178<sup>99</sup>) **\$135.<sup>99</sup>**

### Mini-Horizontal MH175 or HPS150

Compact (built-in ballast), powerful & economical. Ideal for small growing areas, side lighting, and cuttings (Reg. \$119) **only \$95.<sup>00</sup>**

### How to get highest quality products

Our UL approved ballast components are mounted on a heavy 14 gauge steel panel with strong studs to insure whisper-quiet performance and durability. The single heavy panel acts as an excellent heat dissipator, unlike thin, double-walled heat traps that vibrate and echo irritating noise. The 3-way, 38 bi-level louvered enclosure gives maximum cooling air flow for longer ballast life. These louvers give better protection against water splash and dirt entry than screen or slot type systems. Our ballasts come with a rust protective white finish.

### Comparison of Ballast Enclosure

Hamilton Technology	
38 bi-level louvers, 3 way	
Competitor A	
12 louvers	

### NEW! HPS Conversion Bulbs that work in Metal Halide Systems

Convert your existing Metal Halide System into HPS by simply changing a bulb.

**1000w \$134<sup>99</sup> — 400w \$64<sup>99</sup> — 175w \$57<sup>40</sup>**

### CO<sub>2</sub> Injection System

Increasing CO<sub>2</sub> in the air speeds plant growth dramatically and doubles budding and flowering. Fully assembled unit includes: Regulator, Gauge, Solenoid Valve, FlowMeter, Tubing, Instructions... (Reg. \$179) **Sale \$118<sup>99</sup>**

### Best value at Hamilton

Hamilton offers quality products at the lowest prices. Why should you pay inflated prices for inferior products? Order from our large selection of light and hydroponic systems.

### Hamilton's perfect plant nutrients

Great for soil, ideal for hydroponics. All macro/micro elements. Concentrated formulas: 1 lb. makes 100 gal. of nutrient sol.  
**GROW BOOSTER 20-6-16** For rapid plant growth  
**BLOOM BOOSTER 9-30-12** Maximum budding/flowering  
**ROCKWOOL BOOSTER 10-7-16** Formulated for Rockwool  
1lb... \$ 9.50 5lb \$... \$26.95 25lb \$... \$75.00

### Satisfaction guaranteed

Order from Hamilton with confidence that our systems are of exceptional quality, performance and value. Our light systems will perform beyond your greatest expectations. We fully guarantee your complete satisfaction with our **30-day money back policy**. Our lighting systems are guaranteed for **5 years** (bulb 1 year).

### TO ORDER TODAY CALL:

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**HAMILTON TECHNOLOGY CORP.**

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LOS ANGELES CUSTOMERS:

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# THE SECRET OF SUCCESSFUL INDOOR GROWING

the easy Hamilton way...

## Grow bigger, healthier plants faster.

PROVEN RESULTS: Metal halide and high pressure sodium lights create the highest intensity, best quality sun's full spectrum - indoors.

## COMPARE & SAVE!

Highest quality products at lowest prices

### METAL HALIDE: Best for fast plant growth.

### SALE

**MH 1000 Watt Deluxe System** (Reg. \$248) **\$179.95**  
Choice of 24" Horizontal, 48" Parabolic, or MAX-89 reflector. High quality, assembled, QUIET, ventilated ballast box with GROUNDED 6-OUTLET ON-OFF CONTROL, 15Amp PROTECTIVE CIRCUIT BREAKER, 20' amp cord, high lumen output / 12,000 hr. bulb. (Option: Upgrade to G.E. Multi-Vapor with best spectrum add \$14.00)

**MH 1000 Watt Basic System** (Reg. \$182) **\$139.95**  
High quality, assembled, QUIET open ballast; 20' amp cord; socket, high lumen output, 12,000 hr. bulb. (Option: Upgrade to G.E. Multi-Vapor with best spectrum, add \$14.00)

**MH 400 Watt Deluxe System** Ideal for small area up to 4'x4' (Reg. \$199) **\$139.95**  
24" Horizontal, reflector (for MAX-89 or 48" Parabolic add \$9.95). High quality, assembled QUIET, ventilated ballast box, 20' amp cord; 38,000 lumen / 20,000 hr. bulb (Option: Upgrade to G.E. Multi-Vapor with best spectrum add \$10.00)

**MH 250 Watt Mini-Professional System** For 3'x3' area (Reg. \$148) **\$119.95**  
Compact, most powerful mini Metal Halide, built-in ballast, economical to operate

### HIGH PRESSURE SODIUM: Increases budding & flowering

**HPS 1000 Watt Deluxe System** (Reg. \$319) **\$255.95**  
Choice of 24" Horizontal, 48" Parabolic, or MAX-89 reflector. High quality, assembled, QUIET ventilated ballast box, 20' amp cord, 5KV socket, 140,000 lumen / 24,000 hr. bulb. Our most powerful light for flowering

**HPS 400 Watt Deluxe System** (Reg. \$239) **\$174.95**  
24" Horizontal reflector (for MAX-89, or 48" Parabolic add \$9.95). High quality assembled, QUIET, ventilated ballast box, 20' amp cord, 50,000 lumen / 24,000 hr. bulb.

**HPS 250 Watt Mini-Professional System** For 3'x3' area (Reg. \$178) **\$135.95**  
Compact, most powerful mini horizontal HPS, built-in ballast, economical to operate.

**MINI-HORIZONTAL: MH 175w OR HPS 150w** (Reg. \$119) **\$95.00**  
Compact yet powerful, 20" X 10" X 6" electro-white, built-in ballast, economical to operate

### COMBINATION MH/HPS SYSTEM: Perfectly blended lights

**Combo MH 400 / HPS 400 Deluxe System** (Reg. \$378) **\$299.00**  
MH 400 & HPS 400 bulbs under a 24" Horizontal, Reflector QUIET remote ballasts (For MAX-89 reflector add \$9.95) (For Combo MH 1000 / HPS 400 Deluxe add \$69.00).

**Combo MH 1000 / HPS 1000 MAX-89 System** (Reg. \$542) **\$425.95**  
Two 1000w bulbs under MAX-89 reflector QUIET, remote ballasts, etc. Our best system.

**Grounded Light Timer, heavy duty, 15 Amp** (Reg. \$20) **\$14.50**

### LIGHT MOVERS: More light coverage to grow more plants.

**Motorized Lite Track™ - Double your light coverage.** (Reg. \$99) **\$93.95**  
Best single light mover, 6' track, covers up to 8'x10' (EXTENDER for 2nd light \$38.95)

**SunCircle2™ - Increases flowering by blending MH&HPS** (Reg. \$199) **\$187.95**  
Two lights rotate continuously in full circle; coverage 8'x8' up to 12'x12'

**HYDROPRO SYSTEMS:** Our customers say their plant yields are three times greater and two times faster with Hamilton's automated HYDROPRO Rockwool system. Roots are provided maximum direct nutrition and aeration without soil. No soil pests, no soil odors, no weed mg. Fully automated, simple to operate, easy to maintain units. Comes complete with Rockwool cubes for germination & cuttings, Sials for adult plants, easy to clean non-clogging emitters, reservoir & cover, garden trays, pump, timer, irrigation system, pH Test Kit, Grow and Bloom nutrients, & easy to follow instructions

**HYDROPRO SINGLE™:** Ideal for 4 adult plants, min 2'x2' area (Reg. \$84) **\$69.95**

**HYDROPRO 4™:** grow up to 16 adult plants; 3'x9' or 7'x7' area (Reg. \$199) **\$187.95**

### HPS BULBS That work in metal halide systems!

**1000 Watt** (Reg. \$140) **\$134.95**    **400 Watt** (Reg. \$70) **\$64.95**

**CO<sub>2</sub> Injection System:** Increases growth by 40% (Reg. \$179) **\$118.95**  
includes, Regulator, flow meter, solenoid valve, delivery tubes, manual.

**FREE INDOOR GARDENING BOOKLET**  
With any system purchased

**ION GENERATORS:** Clean growing area of smoke, odors, pollen & pollutants.

**AirEaze** \$49.95    **Pulsar** \$96.50    **Phase3** for max. odor elimination \$119.00

**DIGITAL pH PEN:** Instant accurate reading (Reg. \$97) **\$58.95**

**DIGITAL Dissolved Solids (Conductivity) PEN** (Reg. \$97) **\$58.95**

**ROCKWOOL • GROW & BLOOM NUTRIENTS • MYLAR • BULBS •**

**TIMERS • BLOWERS • GROWING SUPPLIES, etc. . . . . Call for Price.**

PRICE SUBJECT TO CHANGE WITHOUT NOTICE

**FREE CATALOG**



Pulsar

CO<sub>2</sub>

AirEaze

Pulsar

Remember MAX 89 is the only double arc reflector that gives you what no other lighting manufacturer offers:

- Maximum reflection, with mill bonded super electro-white glass finish (not spray painted electro-white).
- Quality aluminum construction, light weight, rust proof, with maximum heat dissipation (not heavy, rusty steel).



**5% TO 40% DISCOUNT**  
on all regular prices

**MAX-89 "THE ULTIMATE HORIZONTAL"**  
**"DOUBLE ARC"** for greatest efficiency  
low profile, adjustable, electro-white



**Why Hamilton's Customers are Satisfied?**

- Highest quality products at lowest prices.
- Large inventory with shipment in 24 hours.
- Reliable service and 5 yr. guarantee (bulbs 1 yr).
- 30 day money back guarantee.
- Local pickup possible/hundreds of locations nationwide.
- Fast C.O.D. delivery by U.P.S. - anywhere.

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1

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2



3

THE ORIGINAL AQUAFARM™ aerated-drip system.



4

4 sq. ft. of growing space. Fits anywhere.

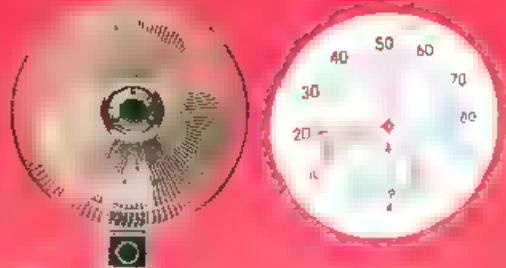


5



6

Diamond Environmental Control Systems help regulate humidity, blowers, and CO<sub>2</sub>.



7

7 sq. ft. of growing space. Fits anywhere.



8



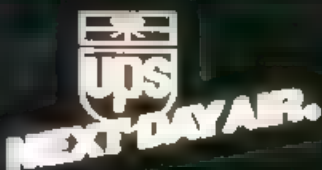
9

9 sq. ft. of growing space. Fits anywhere.



10

10 sq. ft. of growing space. Fits anywhere.



FOR FASTEST SERVICE, ORDER TOLL-FREE  
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 MOST C.O.D. AND CREDIT CARD ORDERS SHIPPED WITHIN 24 HOURS.





# DIAMOND LIGHTS AMERICA'S INDOOR GARDEN STORE.

**IN TEN YEARS WE'VE LEARNED HOW TO KEEP OUR CUSTOMERS HAPPY.**

When you spend your money with Diamond you get good prices, fast shipping rates and a staff of qualified people that know High-Tech gardening. You also get treated like a customer should be treated. You get a 5 year guarantee on all lighting systems (1 year bulb) and a no risk 30 day return privilege. We want to be the best and we think we are.

**1 LUMENARC™**—Advanced designs in horizontal lighting. Large 22" x 27" size with Double-Arc interior design. Only 7 3/4" tall for more useable growing space. 45" Standard or 45" Parabolic hoods also available.  
MH1000 (Super bulb) . . . . . 198.95  
MH400 (Super bulb) . . . . . 148.95  
HPS1000 . . . . . 258.95  
HPS400 . . . . . 188.95

**LUMENARC Mini**—The only small horizontal with the Double-Arc interior design. Dimensions: 11" x 23" x 5"  
MH250 . . . . . 127.95  
MH175 . . . . . 108.95  
HPS250 . . . . . 139.95  
HPS150 . . . . . 109.95

**2 THE INCREDIBLE RAINFOREST™**—Expandable Aero-Hydroponic system. The most advanced and efficient method of hydroponic gardening in the world. Roots cuttings or starts seeds within days and can take them to harvest. Includes Flora nutrients and instructions.  
Single Module (6 plants) . . . . . 64.95  
4 Modules w/Controller (24 plants) . . . . . 279.95  
6 Modules w/Controller (36 plants) . . . . . 389.95  
8 Modules w/Controller (48 plants) . . . . . 489.95  
10 Modules w/Controller (60 plants) . . . . . 599.95  
12 Modules w/Controller (72 plants) . . . . . 699.95

**3 THE ORIGINAL AQUAFARM™**—Reliable aerated-drip pumping system. Perfect for tall mother plants as well as short plants. Includes Flora nutrients and instructions.  
Single Module . . . . . 58.00  
4 Modules w/Controller . . . . . 199.95  
6 Modules w/Controller . . . . . 279.95  
8 Modules w/Controller . . . . . 369.95  
10 Modules w/Controller . . . . . 449.95  
12 Modules w/Controller . . . . . 529.95

**4 SUNTRAYS EBB & FLO SYSTEM™**—3' x 3' (9 sq. ft.) tray with 30 gallon reservoir. Use them in single or multiple tray

systems. Uses either Rockwool or GroRox medium. Complete systems come with tray, reservoir, pump, timer, fittings, medium and Flora nutrients. Also available are sturdy waist-high aluminum tables with levelers.

Tray, reservoir, Pump . . . . . 169.95  
Tray Only . . . . . 59.00  
Reservoir Only . . . . . 59.00  
Complete 1-tray system . . . . . 199.95  
Complete 2-tray system . . . . . 258.95  
Complete 3-tray system . . . . . 309.95  
Complete 4-tray system . . . . . 369.95

CALL FOR LARGER SYSTEMS

**5 SIMEONS ORGANICS™**—Super Tea for growth, Budswell for flowering. The finest Bat and Seabird guanos blended and sifted together with Earthworm castings to produce a completely pure and potent organic fertilizer. Comes in dry powder or liquid.

**6 DIAMOND ENVIRONMENTAL CONTROLS**—Finally, the answer to coordinating CO<sub>2</sub>, exhaust fans, temperature, humidity, and lights. CO<sub>2</sub> only runs while lights are on and never runs while exhaust fans are on. Call us for complete details and prices.

**7** Wall mounted oscillating fan, 16" . . . . . SALE 49.95  
Light Meter . . . . . SALE 24.95  
Digital pH Meter . . . . . SALE 49.95  
PPM Meter . . . . . SALE 49.95  
Temp/Humidity Meter . . . . . SALE 12.95

**8** Our best CO<sub>2</sub> emission system has a short range timer that allows you to run as low as 1 minute on/off times. . . . . 179.95

The AquaCulture CO<sub>2</sub> system with no timer Comes on with your lights and off with your lights. . . . . 119.95  
Green-Air CO<sub>2</sub> generators are completely automatic and run on propane or natural gas.  
CD3 (300 sq. ft.) . . . . . SALE 199.95  
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## CANNABIS CUP

I really loved the September '89 issue. As far as the Cannabis Cup Awards go, I'd like to see more commentary by the judges and more pertinent grow information on the strains. Also, if some rich yuppie wants to tag along, why not charge him cost plus an extra \$1,000? The profit could be donated to the Freedom Fighters. I really love your mag. You are doing a beautiful job.

--Mike

Chicago, IL

Hopefully, the day will soon come when all HIGH TIMES readers can attend the Cannabis Cup Awards. Until that glorious day arrives, however, the only way to get an invitation is by joining the Freedom Fighters (see ad on page 77).

## JURY NULLIFICATION

Next year, Libertarians in Montana will put forth the Fully Informed Jury Amendment, a constitutional amendment by initiative that--if enacted--would force judges to instruct juries of their right to determine law. This amendment has far reaching implications for the battle you are fighting. If a juror disagrees with the marijuana laws, he or she has the right to free the defendant. Alcohol prohibition ended largely because juries refused to convict. This was also the case with the fugitive slave laws. HIGH TIMES readers can help us. Write the Attorney General in your state and ask about jury nullification. If you get a response, please mail me a copy.

--Joe Jendrich

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## LAVOIE TRUST FUND

On Thursday morning, August 3rd, 1989, police in Hudson, New Hampshire broke into an apartment during a surprise drug raid and fatally shot an unarmed man. The Attorney General's investigation concluded that officer Stephen Burke's gun "accidentally" fired while he struggled with Bruce Lavoie. Burke was wearing a black shirt in the pre-dawn raid when he broke into Lavoie's bedroom. One roach was found in the apartment. A

# LETTERS

Send your gripes, questions, personal thoughts, and occasional compliments to: HIGH TIMES "Letters," 211 East 43rd Street, NYC 10017. Unless otherwise indicated, proper names are printed with initials only to protect the innocent, so sign your favorite pseudonym. And use a phony return address.

trust fund has been set-up to help the widow and her three children. Send donations to: Bruce Lavoie Family Trust Fund, NFS Savings Bank, 157 Main Street, Nashua, NH 03060.

--T.A.

Nashua, NH

## GO HOUND

I have to thank you guys for two things. One is for running James Marshall. He's the only rock writer worth a fuck since the days of PUNK magazine. The other is for your article on "How to Go Underground" (Aug. '89). See, I make my living as a bill collector. The more people listen to this Buddy Deane cat, the more I'm going to collect.

--M.P.

Overland Park, KS

## MEDICAL MARIJUANA

On page 26 of the Sept. '89 issue, there is an article titled "Musikka Wins Medical Marijuana Case." This isn't news. Elvy won the case seven years ago. Why have only three such cases been won? I've been trying myself for over ten years. Most doctors support me until they contact the FDA or DEA. Then they act as if I were asking them to commit painful suicide. Why don't the users of cannabis band together and help those like myself with life-threatening diseases? I realize this is just another letter for the "round file," but I guess I feel better in some small way for writing it.

--R.G.

San Jose, CA

You'd feel even better if you joined NORML and the Freedom Fighters, two national groups working for pot peace.

## NORMLIZER

I really enjoyed the September '89 issue. I was especially impressed with Mary L. Mathre's article "Prescription for a Change." I'd like to distribute copies of the article to various people in the legislature. Is there a NORML chapter in San Francisco?

--K.S.

San Mateo, CA

Both questions can be answered by contacting NORML, 2001 S Street, NW, Washington, DC, 20009, (202) 483-5500.

Since the radio stations and newspapers here did not run spots for the NORML conference on September 23rd, we felt it was our duty as Freedom Fighters to stuff all newspaper dispensers on Capitol Hill with page 85 of the September issue of HIGH TIMES.

Billy B-Hits, Reekin' Ron  
Washington, DC

## HARDCORE SCENE

It's great to see your mag give press to good music. Case in point. Murphy's Law (August '89). The article also gave some good info regarding the hardcore scene. Keep up the killer work guys and gals. You are the only opposition to the government's bogus war.

--L

Fort Myers, FL

## BRAIN CELLS

In the past, I've had to dispell many myths about cannabis. The one I find most distressing is the idea that MJ destroys brain cells. After much research I have concluded that while it affects brain cells, cannabis does not destroy, maim or kill them.

--Dooberman

Santa Barbara, CA

Turn to page 32 for a more in-depth analysis on the effect of cannabis on the brain.

## WHERE'S JACK'S BOOK?

You recently had an article in HIGH TIMES titled "Can Pot Save the World?" by Jack Herer (Feb. '89 and June '89). I understand the articles were excerpted from a book titled *The Emperor Wears No Clothes*. I've tried to locate the book at every bookstore in town. Please be so kind as to tell me where I can find a copy.

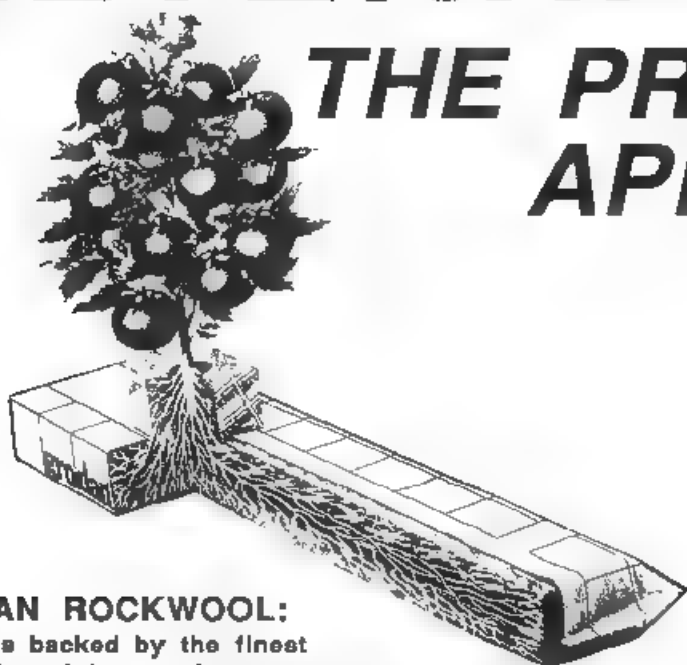
--R.H.

Port Salerno, FL

*The Emperor Wears No Clothes* is out-of-print. As soon as new copies become available, we will print the necessary information. ●



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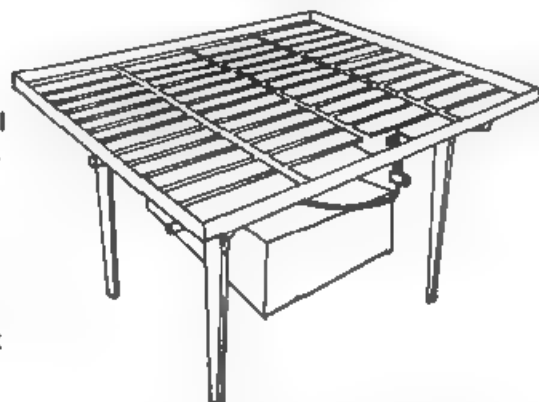
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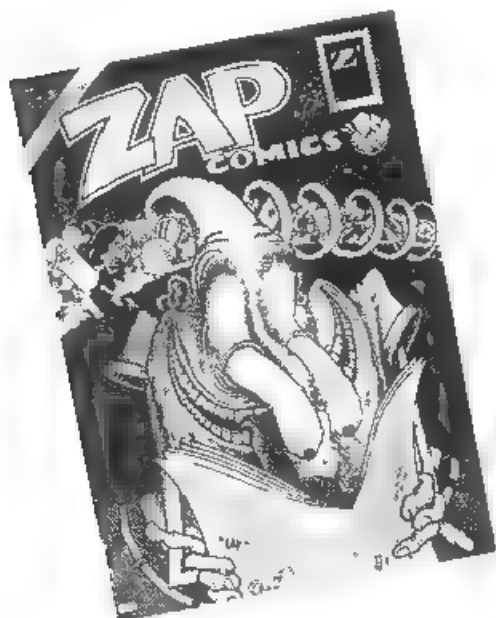
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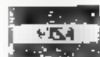
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## NORML ELECTS A NEW DON



**NORML's new chief, Don Fiedler: "I hope to be a lightning rod."**

**by Steve Bloom**

NORML has a new leader. His name is Don Fiedler. He was appointed by the organization's Board of Directors in June and began full-time work as the national director in November. Fiedler replaced Jon Gettman, who was let go in April. (Gettman is *HIGH TIMES'* Washington correspondent and publishes the newsletter, *Marijuana Digest*.)

Fiedler, a Nebraska lawyer, helped lead the fight for decriminalization of marijuana in Nebraska. He started the state's chapter of the National Association of Criminal Defense Lawyers. Fiedler was elected to the NORML Board in June, 1988. A year later, on June 25, he became the eighth director in NORML's 20-year history.

Since taking over, Fiedler, who is 47, has made fundraising his priority. "Don has to bring in money to stay on the job," Board member Dan Viets says. "It's time for all the lawyers who wanted him appointed to put up or shut up. For the short-term at least, he has to ex-

tract significant contributions from attorneys."

Fiedler won't admit publicly to smoking pot ("I'm still wrestling with that inquiry"), and has agreed with the Board's recent ban of "all illegal substances" from NORML's national office in Washington, DC. He's attended and spoken at numerous pot rallies since assuming his position, but says NORML won't sponsor them. "We need smoke-ins," he explains. "The street side of the movement is as important as other aspects."

But most important for Fiedler is pulling NORML out of debt. "Obviously, something has been wrong with our marketing approach," he says. "All we need is one dollar each from every pot smoker. I'm going to try to stir things up, to energize the casual smoker."

"There's a mystique about the national director," says Fiedler. "I hope to be a lightning rod."

**Don Fiedler's NORML-IZER column appears on page 23.**

## AT NORML'S 19th NERVOUS CONFERENCE, THE MEMBERS GAIN A VOTE

**by Steve Bloom**

They came from Georgia and California, New Jersey and Minnesota, Michigan and Utah. One hundred concerned Americans converged on Washington, DC's Dupont Plaza Hotel from September 22-24 for NORML's 19th annual conference. For three days, various issues concerning the marijuana movement were discussed in seminars, hotel rooms and parties.

**FRIDAY, SEPT. 22**

The attendees awoke bright and early after the previous night's partying to hear opening remarks from NORML's John Zwerling. Speeches by hemp activist Jack Herer ("Marijuana--An Historical Overview") and Robert Randall, who uses pot as medication for his epilepsy condition, followed.

During lunch, NORML's new national director, Don Fiedler, was introduced. That morning, the organization's Board of Directors had confirmed his appointment by a unanimous vote. Intent on making a strong first impression, Fiedler, who dressed formally for the occasion, told the audience, "This isn't a one-man show. Egos have to be set aside. We have to be healthy to move forward." He banged his fist on the podium and concluded emotionally, "Only then can we get on to the real fight." Fiedler was alluding to infighting that attempted to thwart his appointment.

The afternoon seminars began with Dr. John Morgan's "Urinalysis, or Is Abstinence Golden?" In one of the conference's most entertaining speeches, Morgan announced that "cheating in urine-testing is more pervasive than ever." He noted these adulteration techniques: "Salt interferes, but can be detected, Drano and bleach make the sample alkaline; vinegar and golden seal tea turn it brownish; and Visine suspends the drug particles."

The Drug Policy Foundation's Arnold Trebach addressed "How Mari-



juana Fits into the War on Drugs." He advised that America pick up on British policies regarding needle-exchanges, drug dispensing at clinics and other health services for addicts. "Do not treat users as the enemy," the grey-haired Trebach pled. "Use jail as a last resort."

The crowd moved to Stewart Mott's house near the Capitol for a party that lasted until midnight.

#### SATURDAY, SEPT. 23

With only a half day of seminars scheduled, the conference resumed at 9 AM. NORML Chapter Reports took up most of the morning. The rest of the day was supposed to be devoted to an outdoor

concert at the Washington Monument, headlined by the New Riders of the Purple Sage. But as was the case two months before at the July 4 rally in Washington, rain dampened the day. Only quick maneuvering by the concert's promoter, Steve DeAngelo, who booked the Riders and the Soul Assassins into a local club that evening, saved the show. That night, HIGH TIMES' "Ultimate Party Magazine" editor John Holmstrom threw a bash at the hotel.

#### SUNDAY, SEPT. 24

During the final day's "Open Forum," NORML announced it would add an at-large seat to its Board, to be elected by

NORML members. Five committees were also set up. "There's an impression that NORML's a closed-door shop," Board member Jeane Lang said. "We'd like to change that perception." People huddled together in the hotel lobby before dispersing in dozens of different directions. Board member Dan Viets hailed the conference a success. We were worried because Don had just come aboard and people didn't know him," he said. "But things went smoothly. The purpose was to re-energize everyone and to reassure ourselves that we're not in this alone. I think both of these goals were accomplished. ●

## THE RALLY REPORT

Twelve pot rallies were held from September 30 to April 15, capping off the "Year of Protest." Here's how they went.

**9/30--Midwest Harvest Festival, Madison, WI:** The largest of the nation's pro-legalization rallies drew a crowd of 20-25,000. People gathered first on the campus of the University of Wisconsin, then marched to the State Capitol, where numerous arrests were made (70 in total for the day). Speakers and bands entertained the crowd, which marched to a third site before the Festival concluded. A major success.

**9/30--Berkeley, CA:** Protesting the anti-drug oath that students who receive Pell grants are required to sign, 2,000 angry students assembled on the campus of the University of California. A 10-foot long joint was rolled for the occasion. Organized by DOPE (Defend Our Personal Ethics).

**10/1--Milwaukee, WI:** 200 protesters gathered in a city park; as in Madison, the police presence was strong.

**10/2--Iowa City, IA:** 200 showed up for the rally on the University of Iowa campus.

**10/4--St. Louis, MO:** 150 came to the famous Arch; several banners were flown and *Hemp For Victory* was shown.

**10/6--Carbondale, IL:** The rally at Southern Illinois University was rained out, so author/activist Jack Herer taught a sociology class instead.

**10/7--Los Angeles, CA:** 75 activists from the Libertarian Party, NORML, BACH, HEMP and the American Hemp Council grouped outside the Federal building on Wilshire Blvd to protest the drug war.

**10/7--Washington, DC:** A huge crowd of homeless Americans and their supporters marched to the Capitol to bring attention to the plight of the nation's homeless. Jesse Jackson spoke and



ANDRE GROSSMANN

Tracy Chapman and the reunited Jefferson Airplane sang.

**10/11--South Bend, IN:** The same day Drug Bizarre William Bennett was in town for a meeting with South Bend's Police Chief, 100 ralliers turned out at Notre Dame University.

**10/12--Champaign-Urbana, IL:** 300 people showed up for the rally at the same University of Illinois campus where Hash Wednesday takes place every April.

**10/13--West Lafayette, IN:** The best turnout since Madison and Berkeley saw 750 students meet on the campus of Purdue. A great party was held afterwards.

**10/14--Indianapolis, IN:** A University of Indiana sorority joined 150 protesters, 20 cops and a band in the Governor's parking lot at the State Capitol.

**10/15--Bloomington, IN:** 300 hung out in a city park on a sunny day. The Midwest contingent, who traveled from rally to rally in a white school bus, marked the end of their tour with one last protest toke for '89.

(Compiled by Steve Bloom, with reports from Maria Farrow, Debbie Goldsberry, Loev Glover and Lynn Osburn) ●

**Twenty thousand protesters rallied in Madison on Sept. 30. The Freedom Fighter below was one of 70 who were busted.**



ANDRE GROSSMANN

# HUEY NEWTON: "A RESOLUTE AND FEARLESS ADVOCATE"

by William M. Kunstler

On August 22, Huey Newton was found lying in a pool of blood on a street in West Oakland, California, with three bullets in his head. Less than five months earlier, another '60s legend, Abbie Hoffman, died in a Pennsylvania farmhouse, apparently of a drug overdose. My initial reaction to both of these deaths was a sense of growing isolation—a feeling that my friends and comrades from that marvelous era were dying around me, and that perhaps I had lived a little too long.

I've already eulogized Abbie in these pages ("Remembering Abbie," July '89 HIGH TIMES). It now seems right and proper for those of us who shared Huey's pathways to put down on paper what was significant to us about his life.

On May 2, 1967, the Black Panther Party for Self-Defense burst upon the American scene when some two dozen heavily armed members, clad in black berets and leather jackets, marched into the California State Assembly to protest a pending arms control law. The organization, founded by Newton and Bobby Seale (they met in college), immediately became a focal point for young African-Americans and spread rapidly through the inner cities. In a matter of months, the Panthers' 10-point program, centering around community control of the police, was being pushed from coast to coast.

Official reaction to the Panthers came swiftly. Huey, the party's Minister of Defense, was charged with the murder of an Oakland police officer in October, 1967. After a highly publicized trial, he was convicted of voluntary manslaughter and given a long prison sentence. The cry, "Free Huey," would soon be chanted by both white and black students at the nation's embattled colleges and universities. Eventually, Huey was freed after two successive juries could not agree on a unanimous verdict and the charges against him were dismissed.

By then, however, the Panthers had virtually been destroyed as a viable force by an insidious FBI program, known as COINTELPRO. From a high-water mark of 45 chapters, the Party began shrinking appreciably. An FBI-engineered schism between Huey and Eldridge Cleaver, the Panthers' Minister of Information, resulted in open, and sometimes deadly, warfare. The free health clinics, accredited elementary school, children's breakfast program, bus service to prisons and clothing outlet—all part of the 10-point program which had flourished until the COINTELPRO campaign—soon vanished from the Oakland scene.



AP/WIDE WORLD PHOTOS

*"The seeds Huey Newton sowed still germinate in the hearts and minds of young blacks everywhere."*

Although Huey still had intermittent problems with the law, including gun, murder, assault and extortion charges, he managed to earn a doctorate in social philosophy in 1980 from the University of California at Santa Cruz. His dissertation, "War Against the Panthers: A Study of Repression in America," exposed the COINTELPRO program for what it was. Huey's books, *Revolutionary Suicide* and *To Die for the People*, reflect his view (partially inspired by Plato's *Republic*) that only a "democratic socialist society free of racism" could meet the needs of people of color in his native land and elsewhere.

Amiri Baraka, the black playwright, described Huey as one of a number of catalytic agents who raised the level of political consciousness of young black people at an extremely critical period in American race relations. Based on the time I spent with him, admittedly not considerable, I would like to add that Huey was an articulate, pensive man. Il-

literate when he graduated from high school, he provided a role model that gave a semblance of hope and a mighty stirring of self-worth to those who simmered in oppressive ghettos.

Like Herman Melville's Captain Ahab, Huey Newton struggled against the unconquerable symbols of evil, as he envisioned them. He has gone down now, lashed to his own white whale, but his struggle is a never-ending one. The seeds he sowed still germinate in the hearts and minds of young blacks everywhere who saw in him a resolute and fearless advocate for an existence filled with more than drugs, despair and degradation. ●

William M. Kunstler is the Vice-President and Volunteer Staff Attorney at the Center for Constitutional Rights, and former East Coast General Counsel for the Black Panther Party.



## FUSION FOLLIES

by Lou Stathis

Even though the squabbling has pretty much died down, the foul stench of bile-breath still hangs thick in the air I'm referring to the smelly cloud lingering over Big Science country generated by the "cold fusion" brouhaha. This, you may remember, erupted last March when two Utah chemists announced that they'd achieved controlled nuclear fusion in a room-temperature, table-top jar.

At first, this was indeed hot news, promising as it did a cheap, easily attainable, pollution-free energy source for our power-gobbling planet. Naturally, it was front paged around the world and, at first, leading scientists hailed it as the achievement of the century--the biggest thing since alchemy. But, almost immediately, the bickering, carping and insults from other scientists drowned out the accolades. Some of the criticism was related to the rather sloppy scientific procedure involved, but most of it was the result of petty rivalry, jealousy, professional pride and politics, played out in the fiercely competitive research and development arena, where an ever-shrinking funding pie must be divided amongst an ever-expanding constituency of glory-lusting scientists.

Ultimately, money--not science, and certainly not the greater good of humankind--was what this free-for-all was all about. The revenue-generating potential of a cheap cold fusion device

dictated the premature and inappropriate way the announcement was made, as well as the secrecy that subverted the institutionalized process of peer review and the high-volume chorus of contempt that arose soon after. This was a sleazy greed-grab from the very beginning, and it made the 1987 France vs. US tussle over who really discovered the AIDS virus (and who consequently would profit from the yet-to-be-invented vaccine) look dignified in comparison.

The first mistake University of Utah chemist B. Stanley Pons and his former teacher, electrochemist Martin Fleischmann, made was calling a news conference to hype their "discovery" of unexplainable heat from a simple electro-

## HIGH-SCI

chemical device--before they had confirmed their results beyond a doubt, and before they had submitted their findings to a recognized scientific journal where they could be reviewed by other experts in the field. This served only to make an already suspicious bunch of fusion-hounding physicists even more cranky and less-than-eager to acknowledge that maybe these guys might have something. After all, physicists had been spending billions on massive high-tech machinery for years, trying vainly to get more energy out of their "hot" fusion reactors than they put in, so where the hell did these chemists--from Utah, of all places, not Stanford, Cal Tech or MIT--come off telling these physicists

that they'd probably been wasting their time?

Things went even steeper downhill when a couple of weeks later, a rival cold fusion team from Brigham Young University announced that they'd found unexplainable neutrons (but no heat) in a similar device (further evidence of a fusion reaction occurring). Suddenly, it became clear that the Pons-Fleischmann group had unwisely jumped the gun to get their procedure and technology patent claims out there before the BYU group could. Then, when the prestigious English journal *Nature* asked the Utah team some tough questions about their submitted paper, they withdrew it rather than provide any answers.

What followed was Nixonian stonewalling (on advice of lawyers, who could smell the research dough and patent royalties evaporating): denial of specific details to other scientists who wanted to duplicate their experiment (essential for confirmation); refusal to participate in several conferences examining the issue; and then denial of lab access to Los Alamos National Laboratory scientists looking to confirm the researchers' credibility. After that, nobody believed the poor schmucks, and the two retreated to their rooms to lick their wounds and come up with more data.

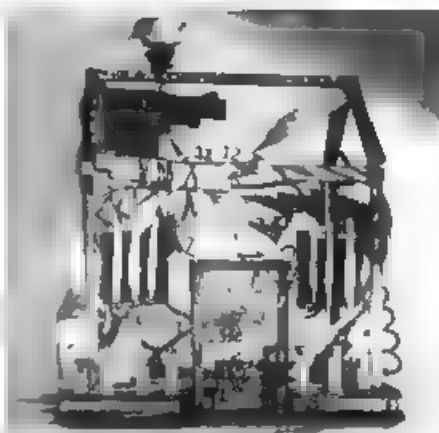
Which is pretty much where the mess still stands, except that the University of Utah did manage to snag \$4.5 million in state funds to open up a cold fusion lab. Which means, of course, that no matter what the scientific charts might show, the experiment was a success, right? ●

## DRUG STUDIES REVEALED

by Judy McGuire

You just can't escape the War on Drugs these days. Ever since George Bush's speech on September 5, it's been impossible to pick up a paper or watch TV without being inundated with anti drug propaganda. The networks have hit us with weeklong sensationalist specials called "Drugs: A Plague Upon The Land" and "Drugs: One Nation Under Siege," and local coverage has been full of furtive drug buys, ex junkies renouncing their habits and politicians--even Mr. President--kissing crack babies. Amidst all this anti-drug nutteriness, two academic studies dealing with the the War on Drugs were rather quietly made public.

*Winning the Drug War*, written by Mathea Falco for the Twentieth Century Fund, takes a comprehensive look at the current drug war's many shortcomings and suggests how drug abuse could be fought more effectively. Falco is quick to admit that total elimination of drug use is a fantasy. She writes: "...no drug policy, however effective can by itself eliminate drug abuse, but thoughtful



KEN SARGENT

### House Arrest by Jimmy-James Greene.

measures may be able to reduce the damage substantially." This is quite a switch from the deluded fanatical ravings of Bush and the Drug Bizarre, William Bennett, who've vowed to rid the streets of even the most casual once-a-month toker. Falco points out, "Since many young people found that terrible things did not occur when they tried marijuana [i.e., *Reefer Madness*], they

stopped believing all negative drug information."

*Winning the Drug War* criticizes drug testing because "careless or negligent laboratory work can lead to inaccurate results...Even when drug tests are accurate, they provide only limited information." The study also points out that "marijuana metabolites may be present in the urine for seven days, while cocaine and amphetamines are difficult to detect more than 48 hours after use."

Although there are many flaws within the pages of *Winning the Drug War*--for example, the author believes that marijuana should remain illegal--the facts and strategies are presented in a rational tone, something extremely rare in this era of drug hysteria.

*Marijuana: Costs of Abuse, Costs of Control*, on the other hand, grasps at straws in an attempt to maintain that pot is harmful and should remain illegal. Author Mark Kleinman, a Harvard researcher, uses outdated or since-refuted data to outline the physical effects of marijuana. Here are some examples:

\* If one joint does as much damage as four cigarettes, an eight-joint-a-day marijuana user is smoking the

*continued on page 29*

# NORML-IZE R



CAPTAIN WHIZZO

## GETTING BACK TO NORML

by Don Fledler

According to the National Household Survey being touted by the Killer Bees (Bush, Bennett and Biden), 11.8 million Americans are casual users of marijuana. But even the survey's author has admitted that marijuana use "was under-reported." In this era of zero tolerance, can you imagine answering "yes" when some anonymous person asks the question, "Do you smoke marijuana?" Under-reporting isn't the half of it: consider that the average user consumes .57 of a pound per year. Divide that into the government's estimated consumption figures, and it is clear that there are at least 25 to 35 million regular marijuana smokers in the US.

NORML's membership has been below 10,000 for some years now; our annual budget is currently close to a penny per estimated smoker. We're the first organization dedicated to marijuana reform and the only 501(c)(3) non-profit corporation devoted to changing the laws, but we're obviously doing something wrong. Why can't NORML energize our obvious constituents to action?

In preparing to assume the position of National Director (NORML's chief

fund-raiser), this was the problem that perplexed me the most. NORML has won many victories over the years. Thanks to NORML activists, eleven states decriminalized marijuana in the '70s. Thirty-four states passed laws for compassionate access to marijuana to patients in need of its therapeutic powers. Our beloved government, however, refuses to untie the bureaucratic knot and allow medicinal use of cannabis. For the last 15 years, NORML's Legal Committee has been fighting to have marijuana moved from a Schedule I controlled substance to Schedule II (so doctors can prescribe marijuana). Last September, a judicial recommendation was made to grant the relief we were seeking. The DEA--which called marijuana "the safest therapeutic substance known to mankind"--has yet to act on that recommendation.

By the time you read this, William Bennett's drug war plan may very well be law, despite NORML's urgent efforts to the contrary. We have held press conferences and dispatched massive grass-roots mailings. We receive hundreds of phone calls weekly from smokers whose jobs are in jeopardy be-

cause they smoked a joint over the weekend, not knowing about a surprise urine test; from family members of loved ones in jail for a traffic infraction that turned into a bust, from poor souls growing marijuana to self-medicate their glaucoma, epilepsy or MS, because they can't afford to buy it or have it prescribed by their doctors.

So what is NORML doing wrong then? One problem is that we've been mislabeled as an organization that puts on seminars in Key West for rich drug lawyers, who have little to do with the average marijuana smoker. It's true, we sponsor legal seminars on drug defense twice a year, and one is held in Key West. However, the lawyers attending these seminars are on the cutting edge. Seminars are conducted to explore the best ways of providing defense for busted marijuana smokers. Those who call NORML looking for legal representation can at the very least be assured that when NORML refers a lawyer, we can from personal knowledge refer a really good one. Anyway, these seminars take a total of eight days a year; the rest of the time, NORML is working entirely for you.

Again, I ask the question: What is NORML doing wrong? I think we haven't been tooting our own horn enough. My mission as National Director is to get NORML back into the national debate; to improve our image, both internally and externally, to get marijuana excluded from the War on Drugs, and then work toward legalization, and to increase our resources so that we can fight without one hand being tied behind our backs.

We need your support to have a fighting chance to reverse the prohibition pendulum in the '90s. NORML's Board of Directors has rightly made my initial priority to raise funds so that we can accomplish our goals. It's difficult to compete with the Partnership For a Drug-Free America, which will commit \$1 million a day for the next three years to blitz the airwaves with drug war propaganda, but it is my deepest conviction that the truth will win out.

The day is coming when pot prohibition will end. The government is going to make it difficult for you, but persevere and stick with us. We have to hang tough together and make our presence felt. Join NORML or send a donation to: NORML at 2001 "S" Street, NW, Suite 640, Washington, DC 20009. ●



## RUDE AWAKENING: A BOX-OFFICE BUMMER



**Eric Roberts and Cheech return to the '80s in their '60s threads.**

**by Steve Bloom**

*Rude Awakening* is a great pot movie. The movie begins to the tune of Dylan's *Rainy Day Women #12 & 35*--"Everybody must get stoned...." The year is 1969, and monster doobs are being passed around a St Mark's Place hippie pad. A girl bathes in an outdoor shower. Petra (Julie Haggerty) throws paint at a canvas. Louise Lasser (as the hippie earth mother, Ronnie) slobbers down food straight from a plate. It's funny and really evokes the late '60s scene.

After Hesus (Cheech) does an LSD experiment (supervised by the government), Feds come looking for him and his partner, Fred (Eric Roberts). They hastily split and wind up in a Latin American country called Managuador. Not much happens in the jungles there except for a lot of smoking and Cheech has a conversation with a fish (good name for a fast-food restaurant *Fish & Cheech*). Finally, after 20 years, they hear gunshots and see a bloody CIA agent falling to the ground. He gives them secret documents about an impending US-backed covert action in Managuador, then dies. This sends them back home--in their hippie clothes, with their hippie values. It's like *Rip Van Winkle*, except they wake up and find Yuppies.

Yuppies take quite a beating in *Rude Awakening*. In a dark, pounding nightclub, Fred tries getting friendly with some moody Yuppies. Instead, he ends up bringing a classic, smug New Yorker to tears. Petra, who has become a high-strung, very successful fashion designer, tries throwing Fred and Hesus out (to no avail) when they arrive at her doorstep. Wherever they go, it's a party, and Petra wants no part of it...at first. Before succumbing to Fred, she wrestles hilariously with a Frusen Glad-

je ice cream container, while reciting a list of '70s and '80s buzzwords and events that Fred and Hesus missed.

Ronnie's apartment, meanwhile, has turned into a restaurant called "Nouveau Woodstock." David Peel sings his "Marijuana" song for a Yuppie crowd that includes Jerry Rubin, Bobby Scale and Timothy Leary at one table. Peel sounds great. Noting the obvious clash of cultures, someone says, "This is a nightmare."

But it's the end of *Rude Awakening* that's the nightmare. The hippies decide to take over a New York University building, but Fred's speech to the students is a mess. The kids walk away, but come back for a rousing finale which lifts Fred right off his sidewalk seat. A version of "Revolution" by Mike and the Mechanics, which includes a peace sign as a bouncing ball, ends this lukewarm farce. One reviewer called *Rude Awakening* a bummer; I just think it could have been a lot better.

## ZIGGY'S "URB-AN MUSIC"

Pretty sneaky guy, that Ziggy Marley. At the very end of his new album, *One Bright Day*, he slips in the best pot song since Tone Loc's "Cheeba Cheeba." In the first verse of "Urb-an Music," the Zigster sings to the tune of a well-known beer jingle, "...for all of you, yes, what it can do." The second and third verses go as follows:

"And they never will get rid of it/  
And who can refuse it/ For peace and harmony/ For love and unity..."

"And they say it's no good for you/  
And they say it can control you/ So the higher one knows."

By the way, *One Bright Day* is another fine album from Bob Marley's kid. No one brings reggae to the masses like the Marleys.

--SB

## WHY SAMMY?

**by C.R. Jones**

"If you want to get known as a swinger, you hire five sexy chicks and let them fight over you on stage and for the cameras. That's publicity, man."

And hey, man, Sammy was one of the grooviest swingers in the business. So says Sammy in his most recent and second autobiography, *The Sammy Davis Jr. Story, Why Me?*, in which the fabulous "Shmoo" looks back on a lengthy career in show business, and lets us know what it was like to swing in the '60s and '70s with cats like Frank Sinatra, Bobby Kennedy and Jimi Hendrix.

By Sammy's own admission, he was one of the hippest entertainers in Hollywood, not to mention the world. Why else would they call him "Mr. Wonderful?"

Sammy was so cool, and felt so "invincible," that by the late '60s, he began flirting with satanism. He painted one fingernail red--a "turn-on" for him and the chicks--which he appeared with on network television. His satanic dabblings included attending orgies in the "dungeons" of many Hollywood homes.

Sammy saw satanism as "an exotic way [for people to] ball each other and have an orgy. And get stoned." He really loved the "danger" of it, and the "debauchery," Sammy writes. "As long as the chicks were happy and weren't going to get anything sharper than a dildo stuck in them, I wasn't going to walk away from it." However, one morning after a "coven," the more rational Shmoo took over, and he went out and bought himself some nail polish remover.

Sammy socialized and partied with a diverse group of people. Aside from the obvious Hollywood types--Liz and

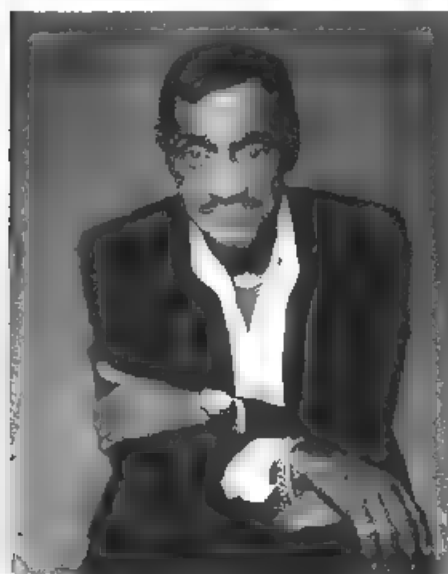


MELANIE NISSEN

Dick, Judy and Liza, the Cos-Sammy also reports that he hung out with the Stones in London, with Hendrix two days before he overdosed and with Elvis in Vegas.

Sammy was torn between two social groups: his "upper social group" (Rat Packers Frank, Dean, Joey, Pete Lawford) and his "lower social group--the rockers." When he was grooving with the '60s rockers, he got deeply into drinking and partying at his pad. He'd "smoke some shit and take a hit and always had a bottomless glass of vodka and coke...[and] there was always sex going on, switching partners, group sex. It was free form."

The Schmoo swung right into the '70s, but when he befriended Nixon, the hip crowd abandoned him. He still threw huge bashes at his Beverly Hills pad, where pot and coke were furnished for all his guests. Porn queens Marilyn Chambers and Linda Lovelace attended these parties, during which X-rated



movies were shown. Everyone was welcome at Sammy's place.

By the '80s, the swinging life got to be too much for Sam. He announced on *The Tonight Show* that he was toning down the jewelry thing. Finally, his pot and cocaine consumption ceased after Frank scolded him. "Sam, I'm so fucking disappointed in you, with that shit. You're the greatest talent that ever lived. You going to let that shit destroy you. Dump it. You're breaking your friends' hearts, Sam. You're a superstar. Isn't that sweet enough?" So the next day, the Candy Man resolved to give up the candy, man.

Despite some poignant words about racism in the entertainment industry, Sammy's life story is poorly written. *Why Me* is so drenched in narcissism and false humility that it's difficult to get through. Ultimately, Sammy forces readers to wonder as he does in the prologue, "Dear God, I don't deserve all this. Why me?" ●

# OUTLAW NATION

## THE LESSON OF ARGENTINA



by Ed Rosenthal

At the end of World War II, Argentina was one of the richest countries in the world. It had large cash reserves and thriving industrial and agricultural sectors. People all over South America used to say, "Live better in Argentina." Just 40 years later, Argentina is suffering from unchecked inflation, simply put, its economy has collapsed.

Argentina has no strong enemies and had not fought a war in this century until the Falkland Islands conflict. Yet its government spent itself into bankruptcy subsidizing economically unviable industries and a bloated military which eventually assumed dictatorial power. While Argentina squandered its cash reserves, few were aware of the decay eating away at the country.

The United States is in the same condition Argentina was in 20 years ago. The American people recognize the condition, but the government and President are still trapped in a war mentality. Though most Americans have said in recent surveys that Japan is America's biggest threat, George Bush still believes the Soviet Union is.

It seems that experts are often the last to know. Russia is in deep trouble. The "evil" empire's economy is falling apart, and its ethnic minorities and European satellites are snuffing freedom. No one, except Bush's "experts," seriously believes that Russia is about to invade either Europe or America.

While Mikhail Gorbachev realizes the deep trouble his country is in, Bush remains blind to America's problems. The US is falling behind educationally, industrially, scientifically and financially. All of these problems can be solved. The US handed victory to Japan and Germany at the end of WWII when it limited the percentage of their gross national products that they could spend on the military. If the US and Russia agreed to limit their defense spending to

a specific percentage of their GNPs, they'd be able to heal their ailing economies.

The new struggle is an economic one, with such weapons as raw and applied science, technology, innovation and marketing. Asian countries have been firing economic salvos at us for years, but we've done little to protect our interests. Until the US changes its defense posture, there is nothing much that it can do to fight back.

Currently, the US spends about seven percent of its GNP on military expenditures. (Japan spends a little more than one percent, and Germany, three percent.) If the US were to divert half its defense budget to non-military priorities, there would be enough money to provide for virtually all the social services that are desperately needed. Deteriorating roads must be rebuilt, public transportation services must be upgraded, the educational system must be restructured and new funding must go to non-military research in both basic science and applied technology.

Although these programs are costly, the country will pay a higher price if it does not renew its industrial capacity and technological leadership. Educating a child now is less costly than providing social services later to an adult who has no earning capacity. While skilled jobs are opening up, the job market in unskilled labor is diminishing. At the same time, positions requiring skills are going unfilled, slowing down the economy further.

In order to get the country on firm ground, Bush has to turn government priorities around. It's hard to educate a child who is homeless, hungry or abused. If Bush wants to be the "education President," he has to feed the hungry and house the homeless, too.

And that, my friends, is the lesson of Argentina. ●



# QUICK FLASHES

## QUICK QUOTES

"If you want to lose the war on drugs, leave it just to law enforcement."

--US Attorney General Richard Thornburgh

"No single step could do more to improve the quality of life in New York City than to legalize drugs. The real question is, why don't the mayoral candidates at least talk about it?"

--Kildare Clark, associate medical director of the emergency department at Kings County Hospital (from an editorial in the *New York Times*)

"If I live until I'm 80, I would like to go to the US for about six months and do all the things that we're forbidden to do here like smoke grass. Then I can die content."

Masahito Otsuka  
72-year-old head of Otsuka Pharmaceuticals, one of Japan's most profitable drug companies (from *Forbes*)

## THOSE KOSMIC BENNETT BLUES

The Drug Bazarre, William Bennett, claims to have dated Janis Joplin when he was a graduate student at the University of Texas in the late '60s. He told *New York's Newsday* in September that the date was uneventful. "I said I'm a graduate student in philosophy. I want to teach philosophy. She said, 'Boy, that sounds good. That sounds a lot better than my life.' Did he win a piece of Pearl's heart? Did they do it slow and dirty? The story didn't say.



## 161-1/2 YEARS!

Arnold Sorenson of K Ibrennan Lake, Montana, has been sentenced to a total of 161-1/2 years in prison (actually 40 years, running concurrently) and \$88,000 in fines on 11 drug charges stemming from his arrest for growing marijuana.

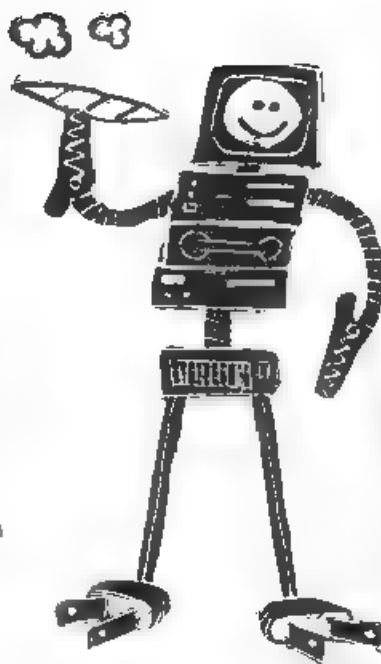
"There is an inherent risk in this type of business," the judge said. "There are good years and bad years. In the good years the rewards are high, but then you have the down side. This year [for Sorenson] is a real down side." Sorenson's attorney, David Harmon, says there will be an appeal.

## POT SEEDS FOR THE BIRDS

People think we're growing marijuana, but we're not," says Harris Peterson, president and owner of Minn-Dak Growers Limited, the nation's largest importer of pot seeds. Minn-Dak applies to the DEA for a permit that allows importation of pot seeds from China (how many seeds is a trade secret). Before the seeds leave the port, they're fumigated and heat-treated to prevent germination. Pet food companies then buy them for making birdseed blends.

## NO JOKE!

How do you know a DEA agent in Latin America? He's the one who doesn't speak Spanish! A State Department report claims that the DEA has wasted millions of taxpayers' dollars on bone-headed schemes like the above, as well as \$25 million on radar balloons that haven't nailed a single heroin or cocaine smuggler and cactus costumes for US Customs border troops to dress up in.



JONATHAN SCHNEIDER

## MARIJUANA BUG

A computer virus invaded the Australian Defense Department's computer system, destroying data in a sensitive security area. When officers tried to use their terminals, the following message appeared on their screens: "YOUR PC IS STONED--LEGALIZE MARIJUANA." Aussie officials suspect New Zealand military intelligence of spreading the virus. The Enzers denied the charge.

## CHARGE IT!

Rory Sanders, who works at the Hapworth Center, a substance-abuse clinic in New York City, says that buying drugs with credit cards (both personal and corporate) from prostitutes employed by escort services is fast becoming popular. "Companies are paying for sex and drugs, and major credit card companies are getting their cut," he complains. "The infuriating thing for us is that when it's so convenient and cheap for people with addictions to buy drugs, it gives them less reason to stop."

## SHE JUST SAID NO

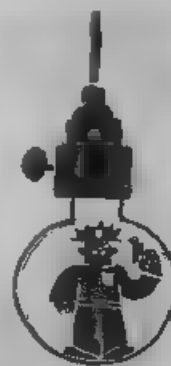
Anna Perez, Barbara Bush's press secretary, learned how hard it's going to be to fight the war on drugs during a recent trip to Paris. While standing on a balcony overlooking the Louvre and the Tuileries Gardens at a party, she was approached by a man from a neighboring apartment, who asked, "Got any rolling papers?" Perez said no, then reported the incident to the party's host, who disclaimed any responsibility for the intrusion. "You know, I don't know who they are."

## POT IS BEAUTIFUL

Ashley Richardson, the beautiful blonde covergirl and Ford model, explained during an interview aired on VH-1 that she maintained her good looks by staying drug free. A week later, she was busted, along with girlfriend Sharon Simonaire, by Southampton, NY police for smoking marijuana in public. Naturally, we tried to get a statement on marijuana legalization from Richardson, but her people declined comment.

## BOOZE NEWS

According to a New York State study, alcohol abuse is the single most serious contributing factor to crime. The 1990 Update to the Five-Year Comprehensive Plan for Alcohol Services links drinking to 70 percent of all murders, 50 percent of all rapes, 60 percent of all child abuse cases and 55 percent of all arrests.



## NORTHWEST NARCS

According to the *Oregonian* in Portland, "Police in Oregon and Washington often use infrared scanners to detect the heat generated by grow lights and the plants themselves within a house." Northwest police are also known to look for covered windows and new vents, as well as through electrical use records from local utility companies.

**QUICK FLASHES** by John Holmstrom

# TRANS-HIGH LIQUOR MARKET



## Los Angeles, CA

Thai "good; sticky; melts in your lungs." \$40 1/4-oz.

Skunk "great; too expensive." \$80 1/4-oz.

## San Jose, CA

Galactic bud "hydro sativa from Humboldt county, potent spacey high; fresh green, and very crystallized." \$80 1/4-oz.

Super galactic bud "same as the galactic, but five times as stoney, best pot going around." \$80 1/4-oz.

Japanese indica "very stoney green bud; exotic taste." \$80 1/4-oz.

Oregon green bud "good indica; mentholated taste." \$80 1/4-oz.

Basic green weed "scarce skippy deals, good pot though." \$70 1/4-oz.

Thai "medium potency, sour taste." \$40 1/4-oz.

Chocolate Thai "medium potency; sour taste." \$60 1/4-oz.

Red sativa "from Santa Cruz, potent high, but you get burnt." \$50 1/4-oz.

Sess "avoid this, too many seeds and stems; you're high for 15 minutes, then it's time for the wheelchair." \$50-60 1/4-oz.

LSD: purple unicorns "major stychrome, potent high." \$2-3 a hit.

LSD: album covers "plentiful; good doses." \$2 a hit.

LSD: white lightning blotter "straight from the Haight in San Francisco; super clean and potent." \$3 a hit; \$150 a sheet.

LSD: Woodstock "good acid; not much going around any more." \$3-4 a hit.

LSD: gooney birds "guaranteed to make your mind melt." \$2-4 a hit.

Cocaine "various grades." \$40-80 gm.

Shrooms "few around; bad quality." \$40 1/4-oz.

Green bud "very cerebral but trippy; smoke a bowl and kiss reality goodbye for two or three hours." \$45 1/4-oz.

Jamaican bud "brown and crumbly weed; shit makes you hallucinate; mash it up, Rastaman!" \$40 1/4-oz.

LSD: white blotter "for a select few." \$3 a hit.

## Naples, FL

Shrooms "dry cultivated indoors, more of a punch than the local varieties." \$30 1/4-oz.

LSD: unknown, too old and expensive. \$5-10 a hit.

Jamaican "typical some weedy; good buzz." \$30-35 1/4-oz.

Petrol weed "if you like the taste of gasoline this is for you, fuckin' gag!" \$15 1/4-oz.

## Palm Beach, FL

Jamaican "good buzz, but kinda short." \$30 1/4-oz.

Dirtweed "gotta smoke a joint and a half to get off." \$25 1/4-oz.

Skunk "local grown, great smell; no low hits; no harm to the lungs." \$200 1/4-oz.

Green sine "leaky a ways here." \$25 1/4-oz.

Brown buds "excellent; you get out weedy with an interstellar high; steady pos; no low hits." \$45 1/4-oz.

Homegrown "a few hairs in seeds; three intake high; great buy." \$40 1/4-oz.

Seeds "red pot; please stop using this." \$20 1/4-oz.

LSD: pink pigs "good for first timers." \$5 a hit.

## Atlanta, GA

Sativa "wonderful, take some BTs and let your mind fly." \$40 1/4-oz.

Homegrown "blaaaah." \$25 1/4-oz.

LSD: blue unicorns "greatest experience I've ever had." \$5 a hit.

## Chicago, IL

Skunk bud "local grown, almost no seeds, trippy high; good strong buds that seem to be furry." \$35 1/4-oz.

Brown "same old shit." \$30 1/4-oz.

Shrooms "got em at a Who concert, I ate four and passed out for 15 minutes, then tripped real hard for three hours; they stunk real bad, but it was a real visual trip; Entwistle never sounded so good!" \$35 1/4-oz.

LSD: Red Barons "the trips are double sized; a friend said they were so visual your eyes tear the entire time." \$4 a hit.

## Indianapolis, IN

Hawaiian sine "pretty good high; rice and sticky; smells great." \$35 1/4-oz.

LSD: gel "lots and lots of visuals." \$5-6 a hit.

Kentucky grown indica "looks great; excellent high." \$45 1/4-oz. \$145 1/4-oz.

Indoor high tech hydro "finishing up." \$75 1/4-oz. \$280 1/4-oz.

Send quotations to THMQ, 211E, 43rd Street, New York, NY 10017. THMQ is intended solely for informational purposes. All entries should be typed or neatly handwritten. If you are unable to compose a legible entry after testing your samples, please wait until you regain control of your penmanship before sending us your information. Marijuana is listed by 1/4-ounce, ounce, 1/4-pound, and pound prices only. Don't bother sending prices for hard drugs. Prices in this issue are current as of September 16, 1989.

Please note: THMQ is NOT a mail-order service. Don't bother trying to order items which appear in THMQ from the HIGH TIMES offices.

Sativa/NL #3 "smooth gobstoppers." \$50 1/4-oz.

Hawaiian "curiously strong." \$75 1/4-oz.

Green sine "abundant; medium; dull buzz." \$35 1/4-oz.

Sativa "brown, semi-seedless; sweet, spacey high." \$40 1/4-oz.

Budica "shake and fan leaf, for desperate casuals." \$15 1/4-oz.

LSD: assorted blotter \$2-4 a hit.

LSD: Liquid "takes you there, and keeps you there." \$4 a drop.

## Princeton, IN

Commercial "90-day trash." \$1050 lb.

Hawaiian "welcome home sailor... go Navy!" \$200 1/4-oz.

Skunk "piced for the rich." \$200 1/4-oz. \$600 1/4-oz. \$1800 lb.

Kentucky homegrown "can't keep it in stock." \$750 lb.

## New Orleans, LA

Voodoo weed "plenty to hex and vex the pure at heart." \$5-10 1/4-oz.

Vampire weed "makes you pray for night to fall, sold only at night; a bag doesn't last until dawn; weed is real; paper comes in red papers, sold a joint at a time; you pay with your soul!" \$5-10 a joint.

Leslie's personal blend "one hit and you're flying like a bat out of hell; plants are grown in cemeteries on the Bayou; can only get one joint at a time." \$20-30 a joint.

Afghan "smells and looks great; smokes like heaven." \$25 1/4-oz.

LSD: doves, cats "good; traces, rushes, and fun." \$5-6 a hit.

Hawaiian puna buds "great as always; plentiful in St. Bernard." \$50 1/4-oz.

Mardi Gras bead 'shrooms "button up your party suit and get down; nice trip; nice tracers and colors." \$120 1/4-oz.

Batman weed "slow talk and hard hitting; zoom! you're fine; burn it's got you, zap! you're hooked, and wham! Holy hempsmoker!" \$10-15 1/4-oz.

Black sativa "makes you sleepy, good high; nasty taste, smells like dirty socks." \$30 1/4-oz.

Indica "plenty around; neat and nasty; beautiful." \$40 1/4-oz.

Chamete shake "brown velvet; nice; good to take and save." \$25 30 1/4-oz.

Wack weed "green; they say, great smoke." \$15-25 1/4-oz.

Sidell sativa "the commercial route." \$40 1/4-oz.

Hash "red, brown, black, and blond; hard to find." \$9-10 gm.

## Lawrence, MA

Colombian "compressed, no seeds." \$40-45 1/4-oz.

Green and gold buds "dry, seedy; rip off!" \$55-60 1/4-oz.

California sine "big bags worth every penny." \$50 1/4-oz.

Skunk "Claude's crop; best stuff around." \$60 1/4-oz. \$750 1/4-oz.

Green bud "red hairs; mellow high." \$50 1/4-oz.

Brown hash "I was wrecked." \$65 1/4-oz.

Shrooms "I laughed all night." \$20 1/4-oz.

LSD: Woodstock "good visuals, long lasting." \$35 1/4-oz.

LSD: blue unicorns "good trip; kinda short; though." \$3-5 a hit.

HIGH TIMES "best magazine on the eastern seaboard!" \$3.95 an issue.

## Muskegon, MI

Mexican "dirt weed; why risk getting busted for this stuff?" \$25 1/4-oz. \$90 1/4-oz. \$250 1/4-oz.

Sine "red hairs, a few too many seeds." \$35 1/4-oz.

Sativa "indoor grown, good taste; good buzz." \$50 1/4-oz. \$180 1/4-oz.

Skunk \$75 1/4-oz. \$290 1/4-oz.

LSD: white blotter "clean buzz; lasts a long time." \$5 a hit. \$200 a sheet.

LSD: album covers "don't forget to piss." \$5 a hit.

## Dumont, NJ

Indica "the infamous lovely Louie buds; half a joint and you have no face muscles." \$40-50 1/4-oz.

LSD: Woodstock "Supernan 'very clean, great trip." \$3-5 a hit.

Barney buds "not the best, but they do the trick." \$30-40 1/4-oz.

LSD: purple unicorns "from Dead show at Cnatis Stadium." \$3-5 a hit. \$125 a sheet.

## Bayside, NJ

Thai son "one hit KO; stuff brown, sticky buds." \$70 1/4-oz. \$250 1/4-oz.

Sess "big, long, fluffy buds; nice buzz." \$50 1/4-oz. \$180 1/4-oz.

Krypto bud "bright green and orange buds; Superman and Batman beware; hard to find." \$75-80 1/4-oz. \$300-325 1/4-oz.

Huntington Station, NY "Soul Huntington; psychedelic weed; visuals and pretty colors; yeah, yeah!" \$35 1/4-oz. \$120 1/4-oz.

Brick weed "good strong high; red hairs everywhere; burns a little too quickly (but what weed doesn't?)" \$55 1/4-oz. \$200 1/4-oz.

LSD: Statue of Liberty "eat one and claw your face off at night." \$5 a hit.

LSD: Snoopy/Doc Cool "mellow, not too speedy." \$3-5 a hit.

Killer Deadhead shrooms "blue as a blushing Smurf." \$40 1/4-oz. \$120 1/4-oz.

## Pawling, NY

Shrooms "assicking a bit overpriced." \$30 1/4-oz.

LSD: unicorns.

Woodstock "mind-blowing; psychedelic trip; straight from the Dead shows." \$2-4 a hit.

Wagoner Falls, NY "Brown 'almost dirt takes a lot." \$40 1/4-oz.

Skunk buds "big, green and sticky; spacey overpriced." \$75 1/4-oz.

## Gladstone, OR

Skunk #1 "killer of course." \$60 1/4-oz.

Green bud "all good; hard to lose." \$40-45 1/4-oz. \$170 1/4-oz.

Jamaican x Haze "all chills; Michelle's favorite." \$10 gm (limited supply).

Afghan skunk hash "comes in lime green paper; labelled can extremely fresh and potent." \$80 1/4-oz.

LSD: space cap "clear cap with liquid LSD smeared at inside end." \$2-3 a hit. \$125 for 100.

Basement lab shrooms "fat and stubby; potent." \$5 gm. \$45-85 1/4-oz.

## Houston, TX

Mexican red hairs "alright bud." \$20-25 1/4-oz. \$40 1/4-oz. \$100-220 1/4-oz.

Homegrown "takes four joints to get high; not worth the money or the headache." \$20 1/4-oz.

Skunk "great bud for the money; four hits and you're a zombie." \$35 1/4-oz. \$320 1/4-oz.

Commercial \$20-25 1/4-oz.

Pine cone bud "lime green; great tasting, smooth high." \$30 1/4-oz. \$75 1/4-oz.

## San Antonio, TX

Texas red bud "you can smell those red hairs from Dallas to El Paso; mellow going down, but don't hold it in too long—it's a lung buster!" \$25-35 1/4-oz. \$100-120 1/4-oz.

Pine bud "only for the iron-lunged smoker, best all-around appearance and aroma; after breaking this shit up, you're fingers will smell like they've been in a pine forest." \$25 1/4-oz. \$45 1/4-oz. \$700-800 lb.

## San Diego, CA

Red bud "moist; good buzz." \$20 1/4-oz.

Green bud "lots of it." \$60 1/4-oz. \$190 1/4-oz.

## Washburn, WI

Indica "one bong hit is all you'll need; laugh until dawn." \$35 1/4-oz.

Ditch weed "watch out; airy green and purple buds; what a ripoff!" \$40 1/4-oz.



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# HIGHWITNESS NEWS

continued from page 22

equivalent in lung insult of a pack and a half of cigarettes per day."

\* "Animal studies suggest that marijuana may also damage the immune system; some human studies find diminished immune response, others do not. Epidemiological evidence is negative so far but inconclusive."

\* "Some clinical reports link marijuana with the onset of mental illness, but the question of the direction of causation again remains open..."

\* According to Kleinman, some of the "costs" of marijuana use are: "incompetence, vulnerability, escalation [ 'gateway-drug theory' ], misbehavior, poverty and dependency."

Not all of *Marijuana* is totally useless. The author does concede that marijuana is not addictive ("A period of forced abstinence does not appear to mark a crisis for a heavily committed user") and causes none of the side effects associated with alcohol abuse ("The acute behavioral risks of alcohol use...are much greater than those associated with marijuana use"). He also points out that "no lethal dose of marijuana has been established for any species."

Kleinman concludes that the solution to the "marijuana problem" is not legalization. "It is a policy of great potential benefits, but also of high risks," he contends. However, increasing law enforcement against pot smokers, Kleinman claims, "costs society too much--in monetary, illicit-market and drug-abuse terms--to make potential reductions in marijuana consumption worthwhile." The author offers this middle-ground solution: "An enforcement reduction would reduce governmental expense without appreciably worsening the marijuana problem... and even with the result of alleviating it in some important ways." ●

## COURT CRUSHES COPTICS' CASE

In June, an appeals court in Washington, DC ruled that religious groups that use pot as part of their sacramental worship can no longer cite their religion as a means of avoiding prosecution under the Federal drug laws.

The group that challenged the law, the Ethiopian Zion Coptic Church, was established in Jamaica in the '30s; it claims its doctrine dates back thousands of years. Coptics regard ganja as the body and blood of Christ and smoke it three times a day as a sacrament. Currently, there are 100 to 200 Coptic Church members in this country.

—C.R. Jones

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# THC and the BRAIN

MEMORY  
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FORMATION

*text by Janet Knappen*

*Illustrations by Flick Ford*

Those of us who have tried marijuana know the high. But what does marijuana actually do to the body? What are the actual physiological effects that create the "high"? Recent research has been making great progress towards answering these questions.

Long studied for its analgesic or painkilling properties, marijuana has 421 molecular compounds, but only one main psychoactive compound—delta-9-tetrahydrocannabinol—better known as THC. Synthetic THC analogs, useful in research, are more powerful than natural compounds; they are called cannabinoids.

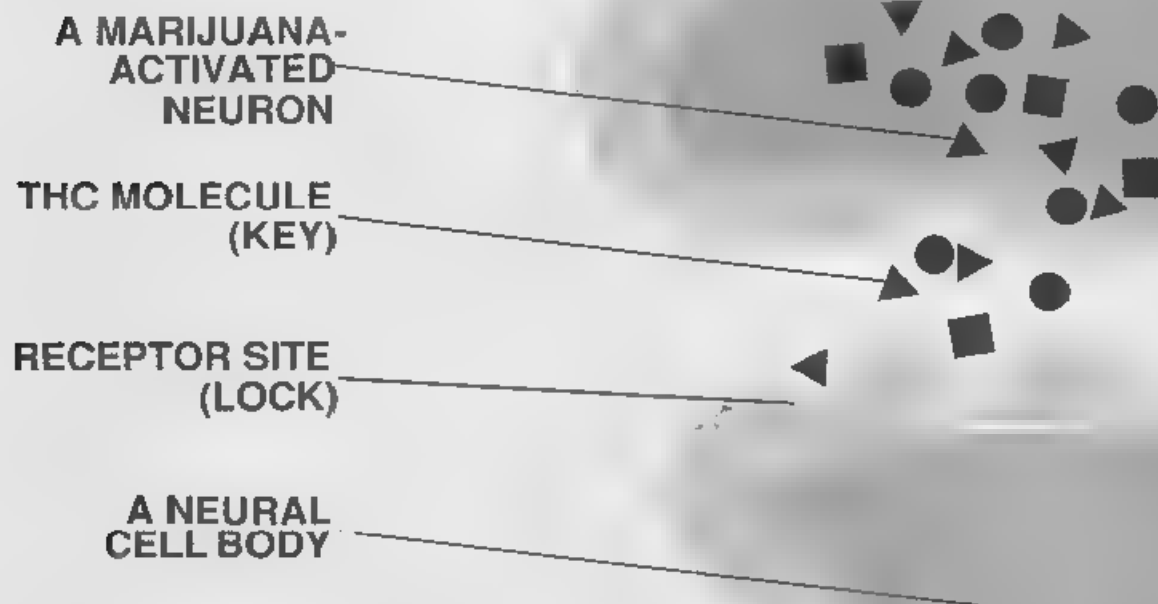
Cannabinoids affect the central nervous system, specifically the brain. Cannabinoid molecules and their effects on the brain and body have been extensively studied by Dr. Allyn Howlett, a pharmacology professor at St. Louis University Medical School. In the fall of 1988, Dr. Howlett and her group had a breakthrough. They located receptor sites on cell membranes that were coded for a major cannabinoid molecule.

# Receptors and Receptor Sites

A receptor site on a cell membrane is an area specifically receptive only to a particular molecule. This can be conceptualized as a lock (receptor) and key (molecule) combination. To get into the cell and be activated, the THC molecule must pass through the cell membrane at a specific receptor site available only to that type of molecule.

Utilizing radioactivity tracking, Howlett proved that cannabinoid molecules bind to receptor sites at the cellular level. Messages sent to the brain upon intake of marijuana are received at this level. They change cell functions by altering the information-processing ability of the cell. You might be pleased to note that these alterations do not hurt or damage the cell or its structures. After several hours the cell no longer responds to the THC molecule's presence in the receptor site.

The density of the specific THC receptors suggests that cannabinoids play an important role in biological functioning. Researchers have not yet found any other molecules able to activate the THC receptor sites. So far, it is not known *why* humans are "wired" for cannabinoid use . we just are.



THC molecules are absorbed into cell membranes via receptor sites.



THC has most profound effects on the frontal lobe which is associated with an individual's personality.

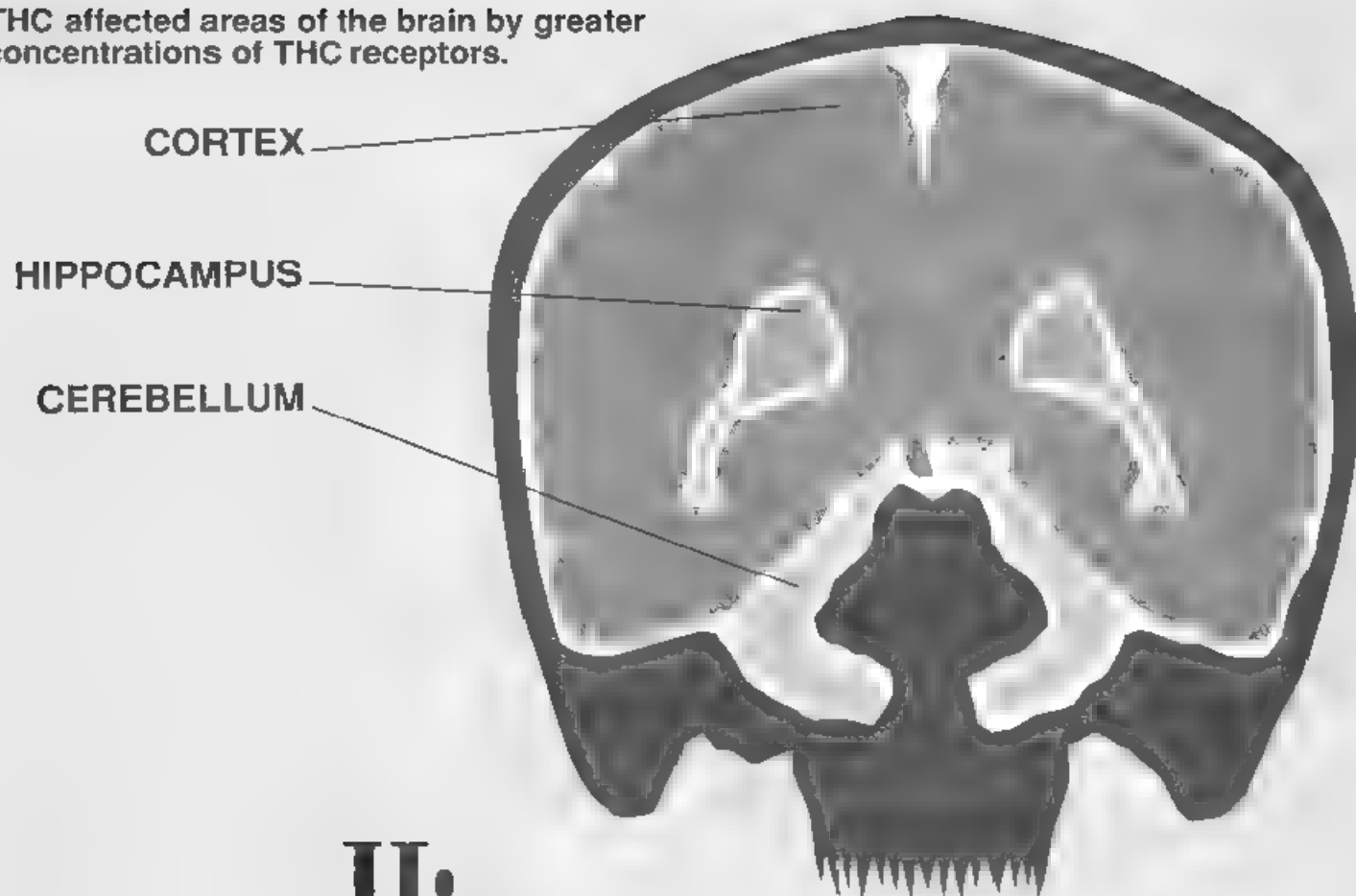
FRONTAL LOBE    PARIETAL LOBE    TEMPORAL LOBE    OCCIPITAL LOBE



# Frontal Lobe

The greatest loading of receptor sites in the brain is located in the frontal lobe area. This lobe is associated with the personality and behaviors. The frontal lobe is involved in the flexibility of behavior reflected by the ability to adapt to new situations. Persons with damage to the frontal lobe exhibit a lack of planning and judgment skill. Further changes in personality can include a general lack of social grace, such as a lack of restraint, use of profane language, and promiscuous sexual behaviors. It should be noted that alcohol also has its greatest impact on the frontal lobe of the brain.

THC affected areas of the brain by greater concentrations of THC receptors.



# Hippocampus

Dr. Howlett has also found an abundance of THC receptor sites in the cortex; the hippocampus and the cerebellum areas of the brain. In general, these areas have important functions in memory and motor skills.

The cortex covers most of the brain and is associated with the higher mental processes of learning, memory, and thinking. It is an associative area of complex functions. Certain areas of the cortex are specialized to receive sensory information and/or to control motor actions; some areas store factual information.

The hippocampus plays an important role in memory. It is associated with the transfer of items from short term memory into long term memory. Stimulation of the hippocampus leads to a dream-like reliving of past events; damage will cause memory loss.

The cerebellum's primary function is the coordination of complex motor movements. It plays an important role in learning and programming motor responses, such as those requiring repetitive motor skills. The cerebellum is also involved in balance and maintaining muscle tone.

The greater loading of THC receptors in these areas of the brain may be responsible for most of the oft-noted effects of smoking pot. A mild high

can have both sedative and psychedelic effects, including relaxation, a degree of intoxication, possible loss of social inhibitions, and an upbeat mood. Perceptual changes are often reported. Speech may become slurred slightly and coordination may be impaired. These effects may vary according to individuals and situations or potency of the marijuana.

Scientists are now looking at the effects of marijuana in a more serious light. In 1982, the US National Academy of Sciences' review on health and safety risks of marijuana use concluded, "Marijuana has a broad range of psychological and biological effects, some of which, at least under certain conditions, are harmful to human health." Considering that Howlett's research found there was no biological cellular change involved in smoking pot, the Academy is going to need to review their review.

Marijuana research continues in such diverse health areas as aging and memory loss, relief of nausea associated with chemotherapy, treatment of Parkinson's disease, Huntington's chorea, and glaucoma, to name a few. Marijuana is becoming more acceptable for medical use, mainly due to the lack of negative side effects and its relative cellular "safety." Maybe the next giant step will be legal self-medication. ■

## INTERVIEW:

## FRANK ZAPPA

"Somebody up there doesn't like me."

Frank Zappa has played on every major stage in the world—including a September 1985 command performance before a Senate Hearing Committee to discuss the Parent's Music Resource Center's proposal to put warning stickers on rock albums with "questionable" content. Needless to say, FZ was not amused. He is influenced as much by what happens in the world around him as he is by his powerful musical vision. Frank spoke with HIGH TIMES recently... here's what's on his mind now.

by Elin Wilder

**HT:** Do you think censorship is an issue in everybody's life?

**FZ:** It *should* be a big issue in everybody's life because the thing that makes your life beautiful is the fact that you get to express yourself as an individual. There are people who willingly give up their right to be an individual and trade it for some imagined security. But I think that if people would just reflect on it, the most valuable thing you have is your personal freedom. Censoring what you say is one of the ways in which people who are not nice can take away your personal freedom. You shouldn't be willing to give up a scrap of it. You have a Constitutional guarantee to it. The way I look at it, that's a contract between me and a bunch of guys whose salaries I pay through taxes. We ought to take full advantage of the fact that we have this contract with our government. We should make the government stand and deliver on it.

**HT:** How do you inspire people to get aware, to read the Constitution, to get involved?

**FZ:** That's a tough question. You have a right to be literate. The school system that is costing so much is not delivering the goods. I think one of the reasons it doesn't deliver the goods is that it's ideologically more appealing to the right-wing elements in this country to create a nation of stupid people who are dumb enough to swallow their rhetoric so those right-wing elements can run an election campaign which is not based on facts and figures, but on bunting and sound bites that don't really tell you anything. You need a docile, stupid electorate in order for a person to be elected. And how do you keep them that way? You starve the educational system so that it doesn't really work. You control the content of the school books which are used in the educational system. You rewrite history to suit your ideology.

In *The Real Frank Zappa Book*, I talk about the myth of liberal media bias; I think it's important that this myth be dispelled once and for all. No liberal

owns a broadcast license. No liberal owns a major publishing house which creates textbooks for US schools. Everybody in the media in the United States is one of those "other" people, with another agenda which doesn't always phase up with the rights that are guaranteed in the US Constitution. They like to bend the rules and engage in situational ethics, and as long as people are stupid and docile, they won't fight it. Maybe it sounds like a conspiracy theory to say that the US schools have been purposely watered down or made ineffectual, but it looks that way to me. There's no reason to keep graduating people who shouldn't be graduating at all. They should still be in school learning how to be functional. They should be able to do their own bank balance. They should be able to spell at least, say, 2000 words of the English language, and be able to read them, if for no other purpose than to avoid problems in traffic.

**HT:** Where do you think this myth of liberal media bias came from?

**FZ:** The way the racket works is this: A right-wing guy who owns the license creates the myth of liberal media bias—with no proof that such a bias actually exists—then demands in the name of fairness that more balance be added into a news story. That buys him the chance to add even more right-wing ideological content into every news story and everything that goes on the air—as if there wasn't enough already. So in the name of fairness and balance news stories must always contain an extra helping of right-wing agenda. And that's the reason for this whole myth about liberal media bias. It was just a promotion started during the Reagan administration. A very clever manipulation.

**HT:** Why was labeling records such a big deal?

**FZ:** Well, my theory is that it was the ground floor of Albert Gore's presidential campaign. I'm sure there were other aspects to it, too, because there was a link between what the PMRC did and the fundamentalist right

that helped launch this crusade. There's some hanky panky going on there.

**HT:** Then what would you suggest to someone who wants to follow in your footsteps to do something different musically and still maintain some sort of integrity, given the restraints that are on them by the music industry and what's going on in the country in general?

**FZ:** I don't know whether there's one simple formula that you could give to anybody who wanted to try and do something original in the music business or even fight against the mediocrity that is poured into your body every day from every media outlet. One possible way is get enough people to refuse to buy records, refuse to watch television, refuse to listen to the radio and make the demand that things change. Because as long as you don't complain, you're going to keep getting more of the same.

You know, the fundamentalists have known for a long time that the squeaky wheel gets the grease. And you've got a lot of squeaky wheels out there, and because they squeak so much it makes it look like there are more of them than there actually are. A normal person who might think, "What is all this?" will just stay at home. They won't ever open their mouths because they're afraid or they're lazy.

One thing that makes a difference between then and now is this thing called FM radio. In the early '60s, when FM radio was a new industry, they played different types of music and tried experimental things. You at least had some media voice, some media possibility. Now FM radio is just like AM radio which is just like television, which is just like everything else. It's all the same. And there is no media outlet for an alternative point of view. Perhaps the last thing that's left is the book. And now that people can't read, nobody reads books. The only other media outlet is the phonograph record or the compact disc. You can still say things in this medium, but if you can't get your record into a store, or if you



can't get it played on the radio, that's another way of eliminating an opposing point of view.... To me, this is one possible subtext to the PMRC jumping all over lyrics. It gives them an excuse to set up a board of censorship which would then, in the wrong political hands, let's say, decide to go over other lyrics now that we're done with sex. We've stamped out sex because we've made it a life-threatening endeavor by spreading these germs around out of a laboratory. Now we'll go after freedom of speech by saying certain words shouldn't be there and we'll just make everything totally safe and totally bland and we will exalt those who are the most bland. That's what award shows are all about. Television award shows for rock and roll basically exalt two qualities: the ability to write a song which has no content and the ability to successfully promote a soft drink or a beer. The people who get the awards always have an endorsement with a major beverage company.

**HT:** I notice you're not doing beverage commercials.

**FZ:** Well, there's a very good reason for that. I don't like beer and I don't like brown soft drinks of any persuasion. I don't think they like me, either.

Americans keep watching these award shows, but why? There is a trend in Europe right now towards US-packaged award shows being turned down by the national networks. I just heard that Spain was offered some big US musical award show. They said, "We don't want it."

**HT:** So what did you do with your Grammy award?

**FZ:** It's sitting next to the television set in my basement so people can say,

"What is that?" I tell them it's a joke.

**HT:** The playlist, which limits what you can and cannot play on the radio, was supposed to solve the problem of payola, but it seems to have given more opportunity to radio stations to deny artists airtime.

**FZ:** Well, it worked like this. You had a bunch of entrepreneurs who were engaging in payola. An ethical question, perhaps. Not the world's most earth-shaking crime. And they made a martyr out of Alan Freed and a few other people. It was actually cleaner when a guy would stick fifty or a hundred dollars inside the sleeve of a 45 rpm record and say, "Hey, Mr. Disc Jockey, play my hit," than it is now, because it's like drugs, sexual favors, weird deals. The whole business of setting up radio consultants to construct a playlist away from the radio station was designed to give the radio station another level of deniability. "We have no payola here. We're paying this man to give us a playlist. He tells us what the hits are." This centralizes the power in

**"Censoring what you say is one of the ways in which people who are not nice can take away your personal freedom."**



LYNN GOLDSMITH

the hands of maybe five guys who are in the playlist business, and they control what goes on the air to a certain degree. Of course, the man who owns the broadcast license also has some control over the playlist, because he can decide that there's something on that list that he doesn't want on his station, and it won't go on.

I think the lack of airplay that I've had in 25 years of doing music in the

United States is amazing. I don't think there's anything wrong with the music that I make. I don't think there is anything in it that would cause it to be undeserving of broadcast airtime, but for some reason it never gets on the air. That's not true in Europe; I've had hit records over there. The largest selling single in CBS's history in Scandinavia was a song called "Bobby Brown Goes

*continued on page 75*

# M A G I C S T O N E S

by **Stephen Peele**

Most of us are now aware that certain mushrooms, when eaten, produce psychoactive effects. The most notorious mushrooms in this group are those which produce psilocybin and psilocin. But have you ever heard of sclerotia? Sometimes called magic stones, other names for it are "comote," "comotillos," "rock of ages," and "philosopher's stone." Dr. Steven H. Pollock wrote, "It's hard to imagine a psychedelic treat more desirable than psilocybin mushrooms, but comotillos are tastier,

smoother in producing their effects, and yet more powerful at higher doses.... When fresh, comotillos have a walnut-like consistency, but they are easily dried to an even more durable form—the rock of ages. These magic stones nevertheless remain chewable and potent indefinitely. Comotillos clearly transport the fortunate consumer to states of spiritual transcendence and jubilation far beyond the realm of ordinary psychedelics."

Not all mushrooms have the power to produce sclerotia. In fact, only a few species do. However,



*The sacred mushroom, **Psilocybe mexicana**.*





**The sclerotium (magic stone) produced by the mushroom *Psilocybe tampanensis*.**

two very powerful psychoactive mushrooms fall into this elite group, *Psilocybe mexicana* and *Psilocybe tampanensis*.

Chromatograph scans of *Psilocybe cubensis* from Alabama and Florida indicate psilocybin readings of .17 to .23%. Scans pulled on sclerotia reveal higher percentages. Sclerotia from *Psilocybe mexicana* produce a whopping .20 to .40% psilocybin content. However, sclerotia from *Psilocybe tampanensis* produces the highest psilocybin level, an unbelievable .24 to .52%.

The Zapotec and Mazatec tribes in Mexico have used *Psilocybe mexicana* as a sacred mushroom for thousands of years. They also have used the magic stones produced by this species. If anything, the sacred secret of the stones was more heavily guarded than the mushrooms ever were. When magic stones were found, the finders surely thought they were being looked upon favorably by the Gods. They were very careful about who they passed this secret on to.

To find these stones, you first have to find the sacred mushroom, *Psilocybe mexicana*. Cow pastures and meadows make good hunting places. Although cow manure can be part of the mushroom's growing substrate, the mushroom is very rarely ever found growing directly from the pies themselves. It grows from the earth or from mulch. Unlike most other mushrooms, it grows solitary. The Mazatecs call it "di-shi-tho-di-nize," or the little bird sacred mushroom.

The cap is yellow-brown, smooth and viscid. The mushroom is small, ranging from 5 to 35mm across. The stem is brown and hollow. It will darken when bruised, but will not always blue. Gills are adnate (attached directly to the stalk) to adnexed (notched just at the stalk), close, brownish with white edges. The spores are dark purple-brown in color.

The mushroom marks the spot. After picking the mushroom, take a knife, or small trowel, and dig up all around the area. A two-foot circle, 6" to 8" deep should do it. If you see any off-white colored thread-like strands growing (mycelium), concentrate the search in this area. The average stone size will be about one inch long. Smaller stones also occur, so search carefully. Stones are chocolate brown in color, and covered with a soft white fuzz. They look somewhat like nuts, but have no hard shell. When broken into, their inside flesh is a lighter brown and will shortly change color to blue. Stones are slightly bitter tasting, similar to the taste and texture of chestnuts.

Because of the special role stones perform in nature, they are actually much easier to grow than mushrooms. Most people have first-time success. The reason they are so easy to grow becomes clear once the mechanics and purpose of sclerotia are understood.

Just as mushrooms are produced from mycelium (the normal physical growing state of mushrooms), so are sclerotia. Sclerotia are actually an alternative expression of the mycelium, to insure the continuation of the species. This special modification is helpful to the survival of the mushroom during environmental extremes. When growing conditions are bad (conditions that might kill any other mushroom), the mycelium builds the sclerotia and dives into a type of "life suspension," waiting for the day when proper growing conditions again resume.



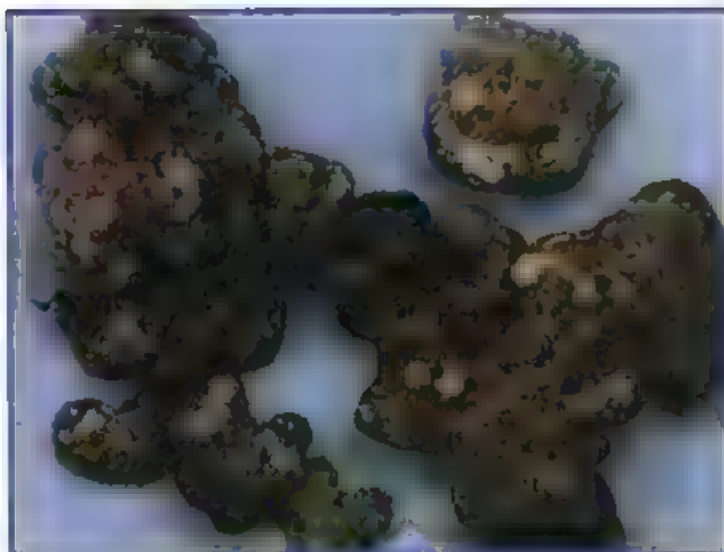
**Magic stones coming back to life. Top stone is shown in dry state. Bottom stones show fuzzy mycelium growth after being submerged in water for just two days. These stones were two years old.**



High temperatures, dessication or nutrient deprivation cause the mushroom to form this resistant structure. When you replicate the above conditions, and place the mushroom in the dark, the mycelium will create sclerotia. It builds a thick outer layer to protect the inside against the extremes of the current environment. The sclerotia contains stored nutrients and can survive under unfavorable conditions--probably for more than twenty years.

Because these magic stones have this strange power of survival, they can be used years later to grow more sclerotia and mushrooms. Dried stones can be placed in water and they will come back to life. Then they can be placed into a growing medium for an entire new crop. So once you have the magic stones, you will always be able to grow mushrooms and sclerotia.

The first sterile cultivation of psychoactive sclerotia was probably achieved in late 1957. Albert Hofmann needed more samples of *Psilocybe mexicana* to isolate the unknown compounds responsible for this magic. Two of his colleagues, Dr. A. Brack and Dr. H. Kobel, were able to produce a large quantity of sclerotia from this species. The yield was very impressive. It was this procedure which actually produced the extracted material which not only gave away the chemical structures of psilocybin and psilocin, but also broke the ground for synthesizing them. It was the sclerotia, not the actual *Psilocybe mexicana*



**Collection of magic stones.** The top two stones (lighter color and more round) are from *Psilocybe mexicana*. The bottom stones (darker in color) are from *Psilocybe tampanensis*.

mushroom, which revealed the riddle of the sacred mushrooms.

Although these magic stones pose no real lethal threat, they can produce psychological disturbances in individuals who are not mentally stable or mentally prepared for large doses (5 grams or more). First time users would do best to take only a half gram of fresh sclerotia.

Although many phases of this research are now under very tight restrictions, much has been learned about magic stones. Psilocybin has similar effects on the central nervous system as LSD and mescaline. Psilocybin, however, is the least toxic of all known hallucinogens, and this includes THC. Here's how their lethal dosage levels compare (LD50--the dose that kills 50% of rats tested):

LSD	0.3mg/kg
Muscimol	4.5mg/kg
THC (tetrahydrocannabinol)	42.0mg/kg
Mescaline	370.0mg/kg
Psilocybin	420.0mg/kg

Psilocybin can cause hallucinations in 15 to 20 minutes, though sometimes it can take up to two hours. It has similar effects to LSD. Both work by triggering serotonin receptor sites and pathways in the human body, most likely by inhibiting or stimulating the serotonin neurochemical system which control the functions of the mind and brain. What one experiences when using these compounds is unlike anything arising from normal consciousness.

Now that the nature and purpose of sclerotia are understood, they have proved to be one of the easiest plant structures to grow. If your mushroom-growing attempts in the past have failed, if your house plants always die from high temperatures, no sunlight, or lack of moisture and proper nutrients, try growing sclerotia.



**Mushroom mycelium growing through freshly uncovered ground.**

*continued on page 76*

# 18th Century GROW



In the 1600s and early 1700s, colonial leaders and their English backers desperately sought schemes to turn their North American settlements into successful money-making ventures. Hoping to entice investors and settlers, a number of products were hyped with varying degrees of success: sugarcane, silk-worms, deerskins, cotton, tobacco and--you guessed it--hemp. The South Carolina and Georgia colonies eventually became tremendously profitable through the export of rice and indigo grown by a coerced workforce of African slaves. However, hemp did find a niche as a minor crop grown in less fertile, less desirable, upland areas. In its January 8, 1732 issue, the South-Carolina Gazette published what is perhaps the first American example of what is now a familiar institution to HIGH TIMES readers --the grow article. Hemp was mainly considered useful as a raw material for "naval stores"--canvas sailcloth and rope-fiber--and the article, written under the pseudonym of "Agricola," was mainly devoted to the process by which colonists could convert hemp to fiber. But as the following excerpt shows, the settlers were not oblivious to (though somewhat confused about) marijuana's emotion-bending, consciousness-altering and medicinal properties:

## How To Grow Hemp

...[B]eing a well-wisher to Agriculture in general, and particularly the Advantages that may arise from it to this Province, ... I have transcribed a short Account of the Culture of Hemp, and likewise the Management of it, after it is gathered; and tho' I believe the several Operations required in that Management may be more a Secret here than the Method of cultivating it. if it may be thought any way of Use to the Publick. . (I hope) the short natural History of the Plant (will not) be disagreeable to the Curious, who mayn't have had an Opportunity of seeing it before. And whatever else occurs to me in the Way that may possibly be of Service, I shall, with Pleasure, communicate in this Manner.

Yours, &c.  
AGRICOLA.

HEMP is a Plant of great use in the Arts and Manufactories, furnishing *Thread, Cloth, Cordage, &c*. It is by Naturalists call'd *Cannabis*, and bears a near Analogy to *Flax, Linnum*, both in respect of Form, Culture and Use

The *Plant* is annual, that is, must be sown a-fresh every Year. It rises quick into a tall, slender Sort of Shrub, whose *Stem* however is hollow, and big enough to be *charr'd*, and *thus* is used in the Composition of *Gun-powder*. Its Leaves arise by fives or sixes from the same Pedicle, and are a little jagged, yielding a strong smell, which affects the Head. Its Flowers grow Grape-wise, opposite to each other, in manner of St Andrew's Cross, each consisting of five yellowish Stamina, encompassed with a like number of Petala, purple without and white within. Its Fruit, or Seed, is small and round, fill'd with a white solid Pulp, and grows on the Top of the Stem, having its Pedicles distinct from those of the Flowers

Lastly, its Bark is a Tissue of Fibres joined together by a soft Matter, which easily rots it.

*Hemp* is of two Kinds, Male, popularly call'd *Karl*, and Female, or *Fimble*. 'Tis the Male alone that produces Seed to perpetuate the Kind. From the Seed of the Male arise both Male and Female

The Seed is said to have the Faculty of abating venereal Desires, and its Decoction in Milk is

recommended against the Jaundice, &c. The Leaves are held good against Burns and the Juice thereof against Deafness. The Powder, or Flower, mix'd with any ordinary Liquor, is said to turn those who drink thereof stupid.

*But these are not to be used but with Caution and Judgment.*

The *Plant* is sown in May, in a warm, sandy, rich Soil, and is it self sufficient to destroy Weeds on any Ground About *Lammas* [editor's note--August 1] they begin to gather it; the light or Female being first ripe. The Marks of its Maturity are its Leaves turning yellow and the Stalks white

The Way of gathering is to *pull* it up by the Roots, after which they bind it up in Handfulls or Bundles. The Male they let stand 8 or 10 days in the Air, that the Seed may dry and ripen; after which, they cut off the Heads, and beat or thresh them, to get out the Seed. They also beat the Female, to get out a thick, fetid sort of Dust contained therein

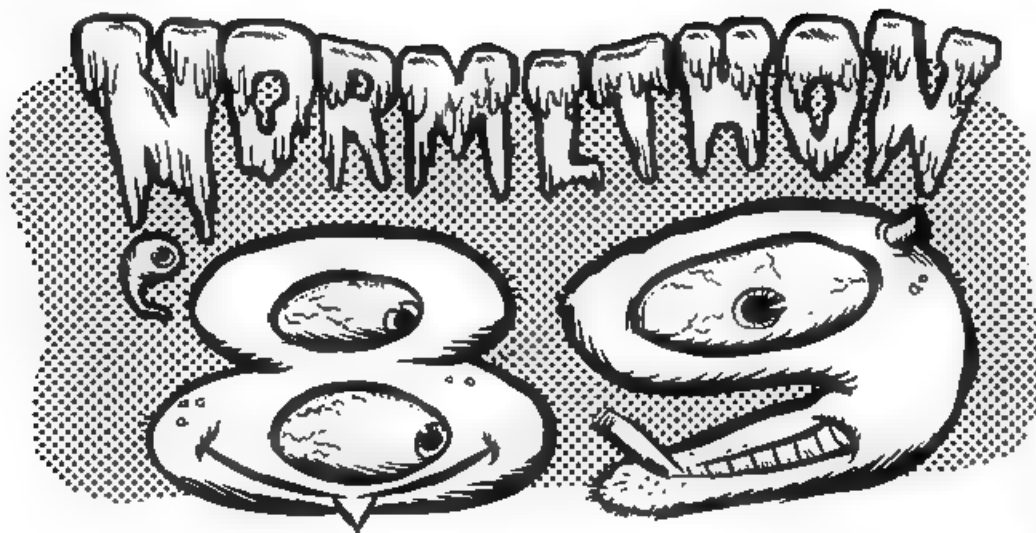
This done, they proceed to *water*, or *rate* it, by laying it 5 or 6 Days in a Pool or other stagnant Water to rot the Bark. A Stream or running Water wou'd do the Business much better, but that it infects the Water, and gives it a Quality very pernicious to the Health, for which Reason it must not be rated in Waters used for domestick Purposes

When rated and taken out again, they dry it, then *brake* or beat out the dry *Bun* or *Hex*, which is the woody part of the Stem, from the Rind or Bark which covers it, by brushing it in a tooth'd or nick'd Instrument call'd a *Brake*, beginning with the *Root End*.

When the *Bun* is sufficiently broke and hangs by small Shivers, they *Swingle* or beat them out with a piece of Wood, edged for the Purpose. Note, the *Karl Hemp* they sometimes break with the Fingers, and strip off the Rinds, without the help of the *Brake* or *Swingle*

The next Thing is to *beat* the *Hemp*; which is done either on a Block, or in a Trough, with a Hammer, or with Beetles, till it feel sufficiently soft and pliable

It remains now to be *heckled*, or passed thro' divers tooth instruments, not unlike the Wool dresser's Combs, of different fineness: This separating the shorter Tow from it, the rest is fit to be spun, wove, &c for Thread, Cloth, Cordage, or the like ●



**Dr. Indoors on trial!**



**Reefer Rodent.**



**The Outlaw Tokey Bales.**

### by John Holmstrom

It was supposed to be a one-time thing. The TOP 100 NORMLTHON started out as an attempt to raise a little money for NORML--an easy way to put your money where your mouth is when it comes to legalizing pot. By sending some money, with a ballot with your own personal message, to the TOP 100 (the TOP 500 contributors to this year's NORMLTHON), people could financially support the legalization movement and make a statement at the same time.

The response from the original TOP 100 NORMLTHON, published in the April 1988 issue, was fantastic. Letters of support, money orders, checks, and spare change kept coming into the office. The letters said, "DON'T STOP!" "KEEP IT GOING" and "THIS IS GREAT." So the TOP 100 did it again. And HIGH TIMES readers responded by sending in almost five times as much as collected in 1988.

NORMLTHON '89 ran for about six months, from December 1988 to July 1989, and raised almost \$10,000 for NORML. Readers held parties, put collection jars at the places they work or live, sent money every month, skipped lunch and sent in their lunch money, collected spare change, and sent a few bucks to support NORML and do something to change the world. NORMLTHON '89 has not ended, however--part of the money we raised has gone into printing a special NORMLTHON comic book, which will continue to raise money for NORML as long as people buy it.

The NORMLTHON comic contains some great stuff. In fact, it's a must-have item for HIGH TIMES collectors. There's a two-page *Hep Cat* (which will appear ONLY in the NORMLTHON comic book), a two-page strip by Dr. Indoors indicating why he's recently disappeared from HIGH TIMES, two hilarious three-page strips by the inimitable Ace Backwoods of *Twisted Image* fame ("My Troubles With LSD" and "Hippy Boy"), *Rasta Claus* by Matt Baier, *The Top 500* (reprinted on pages 93-96), *Studs Kirby* by Peter Bagge, a one-page *Reefer Rodent* by Harry Meadows, and assorted contributions by HIGH TIMES faves Brad Keough, J.D. King, Mike Pearlstein, Ken Weiner, Steve Fiorilla, and others.

I'd like to thank all you readers who supported the NORMLTHON, and give special thanks to Ed Rosenthal. After he wrote his now-famous complaint (see page 44), NORMLTHON contributions doubled. We're reprinting it here, hoping that those of you who are still holding out on contributing will now be inspired to buy the NORMLTHON comic book. (All proceeds will go to NORML.) But send in your money quick--the valuable collector's first edition will sell out soon!

Many people sent in letters of support with their donations, and expressed their feelings that something, or anything, be done to fight the anti-drug hysteria. There were also a few people who wrote in with





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*Hep Cat and the gang hanging out at the junkyard.*

legitimate reservations about supporting NORML. For instance, "Batman Seed" from Bat Cave, NC wrote:

I am very unimpressed with NORML over the years. No one stands to lose more than I from criminalization, and I would have massive life improvement from decrim or legalization. And I support legalization wholeheartedly. I supported LEMAR. I was a member of NORML in the early '70s.

My impression of NORML is a bunch of bureaucrats who spend more time going to seminars in the Keys, arguing political philosophy, and infighting about effective means of action—which seems to equal no action. Could you please in very specific words tell me what they are doing? Can you print their budget? The other non-profit works I support do so. Are there any real cases and issues they are winning?

I feel the way change occurs is not through the courts. The civil rights laws did not give people any more rights. What brought about change was the mass awakening to the ridiculous situation at hand. You know, the "I have a dream" speech, tens of thousands marching against the war, the loss of the boy next door, the assassinations of good men... not the lobbying of a "representative." Do you really think my writing Jesse Helms, my senator,

will move that ignorant toad? Gettman seems to think so. He almost seems to want me to embrace these slime-balls. The national Democratic and Republican parties are just so many pawns in a sick game, controlled by corporate money, playing on fear, to keep human potential as low as possible (in my humble opinion). Local action, such as OMI (who I supported), is our hope...

So guys, convince me... What is NORML doing? Let's see some figures. Will I be subsidizing their parties at the Hyatt? Let me see the cases they won, the difference they made this month. I want to know if they are doing something—blow that horn!

Well, Mr Batman Seed, I passed your letter on to NORML. Their new National Director, Don Fiedler, has promised to write his first NORMLIZER column for Highwitness News in reply to your valid questions.\* I wish Batman Seed could work at the HIGH TIMES or NORML offices for a week, to answer the phones. When I first started here at HIGH TIMES I was not interested in the legalization movement. Then I started answering the phones.

Someone's facing a drug test, and smoked a joint a month ago. How long does THC stay in one's system? How can they pass a drug test? Someone else failed a drug test and doesn't know what to do, because they never took an illegal drug. Is such a thing possible?



### The hilarious Hippy Boy.

What do they do? Someone from a TV show needs a speaker for a television show to speak out for legalization, and can't find any responsible spokespeople for the cause. Do we know anyone who can fly to Los Angeles on one day's notice? Someone else just got busted, and needs a good lawyer. Where can they find one?"

We get lots of calls like these, every day, and so does NORML. If NORML did nothing else, they are, at the very least, visible--the "help-lines" in the war on drugs. But NORML does a lot more than just answer phones, and help callers with problems. Specifically, NORML has organized many legalization rallies around the country over the last year--the same "marches against the war" you describe in your letter. While Jon Gettman was national director, he worked diligently to get the word out, through newspapers and television, about the existence of NORML and the idea of legalization.

Finally, Batman Seed, you're right when you say that local action accomplishes the most good. In fact, the national office of NORML ((202) 483-5500) helps people form local chapters, and get local actions going.

Outside of Ed Hassle's Freedom Fighters (who also need your support--join today!), your friends or relatives who get high, and a handful of enlightened politicians, who is out there pushing for legalization? NORML is not 'they,' it's 'we.' Until Batman Seed, or someone else, starts a new National Organization for the Reform of Marijuana Laws, marijuana consumers have no one else. And that's why, if you believe that the laws need to be changed, you must support NORML. ●

## ED'S COMPLAINT

I was in the HIGH TIMES office the other day and John Holmstrom was totalling the contributions to the NORMLTHON that the magazine sponsors. John was encouraged by the total, a little less than \$2,000. I was appalled. HIGH TIMES has about half a million readers, and they gave an average of just over one-third of a cent each. This is horrendous. Every month I receive letters complaining about NORML's lack of action. But how can an organization function without a budget? NORML is the only national group that represents the marijuana user, yet its constituency--which regularly pays \$300 an ounce to get high--contributes just over a third of a cent to the people trying to keep them from getting busted? This is absurd.

NORML functions on a budget smaller than the incomes of some of our readers! Marijuana smokers should have more respect for themselves and the people trying to help them. If NORML had a larger budget, say \$50,000,000, a lot of the anti-pot legislation making its way through the government would be eliminated. With a budget of \$50,000,000--about a dollar per user--marijuana would be legal within a few years. When are you all going to wake up? You cannot sit back and expect positive change to take place. You must help. During the NORMLTHON, I asked people to voluntarily send in \$1 with their questions. Most of you were too cheap to even do that. The reality is that if we want to stop the cultural genocide now taking place, we have to stand up for our rights. Supporting NORML is one way of doing this.

GIVE AN OUNCE. That's right. Each grower, smoker and dealer should give the dollar equivalent of an ounce of weed. Whatever an ounce of the weed you grow, sell or use costs, give that week or month. If you don't contribute, the laws will never change.

Think of your contribution as a kind of insurance. It is much cheaper than hiring a lawyer when you get busted. If you are paranoid about having your name on a list, you can still give anonymously, so that's no excuse. You can send checks payable to NORML to me. I'll make sure they get them.

Don't disappoint me. Send your money now. NORML needs it.

NORML is a poor organization. It has minimal offices in Washington, D.C. Its full-time employees are paid minimal amounts, and the organization is always behind in both wages and rent. Still, it allocates its limited resources wisely.

Most of NORML's funds are spent educating the public and legislators about the perils of current marijuana laws and proposed repressive legislation. NORML speakers were well represented at the recent Congressional hearings on drug legalization.

NORML marshals top-name lawyers who work for free for legalization, but resources are also spent on lawsuits. NORML lawyers and funds have been supporting the 17-year-old suit against the DEA to reclassify marijuana for medical use. Recently, the Administrative Law Judge ordered the DEA to reclassify the substance. The legal battle is continuing and NORML has a number of other suits going, as well. That's where the money goes. NORML will need a lot more of it to make pot legal.

It's not too late to contribute to the HIGH TIMES TOP 100 NORMLTHON. By purchasing a copy of the NORMLTHON comic book, you're not only supporting the legalization movement, but you're investing in a book that could become a valuable collector's item. To order a copy of the NORMLTHON comic book, send \$9.95 per copy, plus \$2.00 to cover shipping & handling, to NORML, 2001 S Street NW, Suite 640, Washington, DC 20009.



## SEA OF GREEN -- ORGANIC STYLE

The Sea of Green method was pioneered by the Super Sativa Seed Club of Holland. According to their method, clones could be flowered immediately to obtain miniature plants with popsicle-size buds. By packing hundreds of plants under one or two lights, S.S.S.C. was able to come up with some remarkable yields in a very small space. But the method relied on rockwool and high-tech chemical farming. What would happen if the same theory was applied to organics? Would the yields be even greater? Yes, says Daryl, of Organic Designs...



**text and photos  
by Daryl**

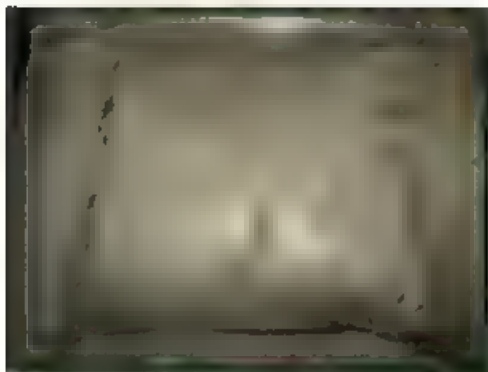
Anyone who has grown indoors knows it is not as easy as some people think. It can, in fact, become a nightmare, and cloning is probably the hardest part. I've been involved in the study of herb for over seven years, and I've tried over 20 different methods of growing. Here are a few tips I've learned along the way.

My growing tables are built on casters. They have four levels with 24 square feet per level. One system can handle up to 1,728 plants. The plants are miniaturized clones and are planted three per gallon-size pot. I grow 300 seven gram buds under each light.

## **GERMINATING SEEDS**

Choose hybrid or *indica* seeds that have been bred for indoor cultivation. Go through the seeds and pick out the strongest, healthiest looking ones. Put the seeds into a ziplock baggie with a clean white wash rag that has been soaked in warm water and treated with Nitron A-35. Do not squeeze water out of the rag. A 6" sandwich baggie is large enough for 100 seeds. A 10" baggie is good for up to 300 seeds.

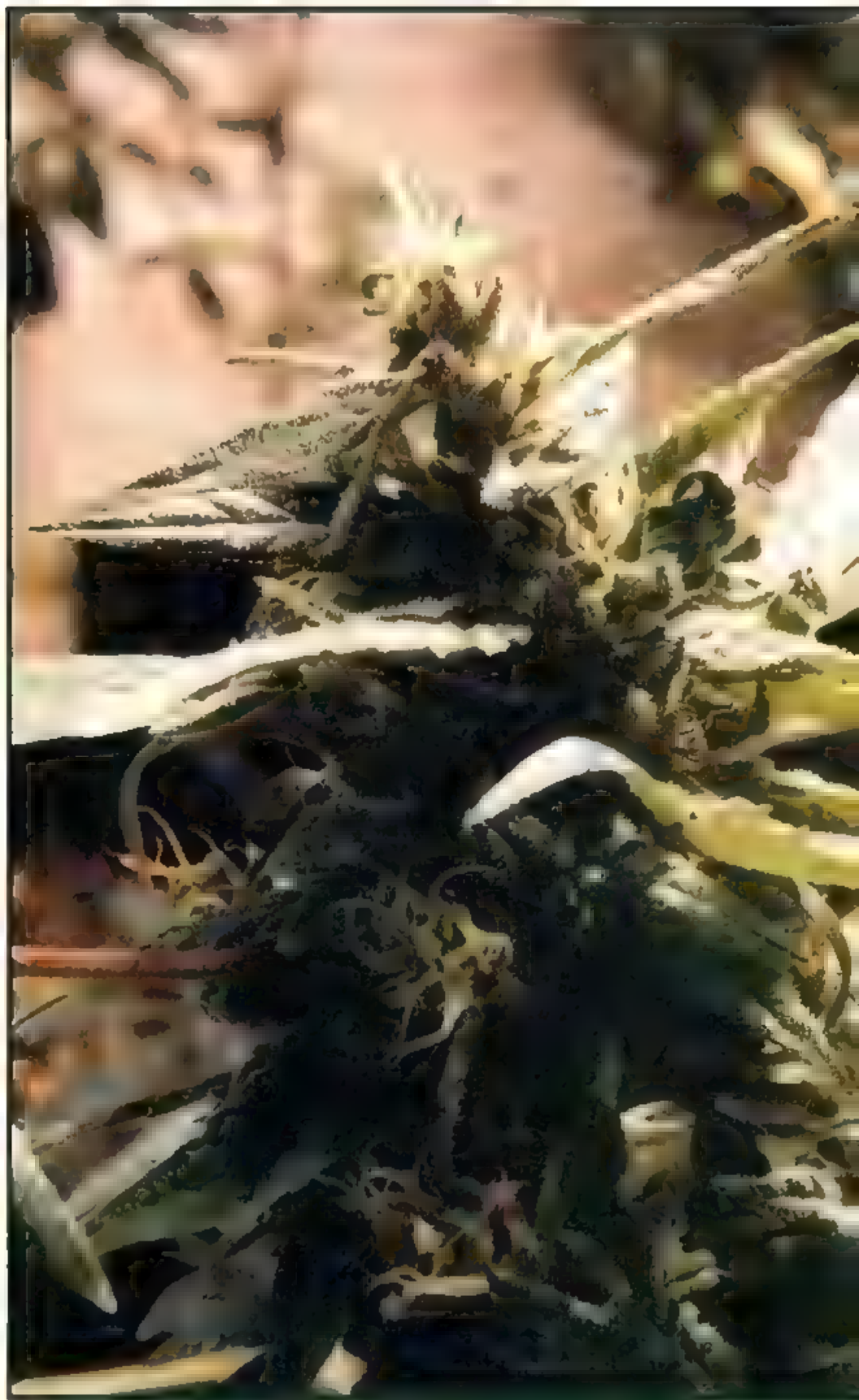
Blow air into the baggie and seal. (If you smoke cigarettes or have a cold, do not blow air into the baggie - your seedlings will die. I've also experimented with putting pure CO<sub>2</sub> into the baggie, but this killed seedlings.) Place the baggie in a warm spot. The top of a refrigerator



***Seedlings being germinated in plastic bag.***

works well. Do not place the baggie in direct sunlight. It will be too warm and the seedlings may rot. Keep in mind that seedlings do not require light to sprout. Most will germinate in two or three days, but there are strains that take up to two weeks.

After the seedlings have germinated, let them grow for a few days until they are one or two



***Perfect "popsicle" top.***

inches long. Open the corner of the baggie, suck all the air out and reseal. The seedlings can now be placed into your refrigerator where they will stay in suspended animation until you are ready to plant. Seedlings can be stored like this up to two months without any

harm. However, if germinated seedlings are not stored in a vacuumed baggie, they will continue to grow. My experience has been that seedlings placed in the refrigerator for a few days grow better than plants not given this treatment.

# CLONING

Cloning can be very discouraging if you don't know what you're doing. It usually takes one to two weeks to find out if your clones are going to make it and they can slowly rot from a variety of ailments. Temperature is crucial to success. The first five days after cuttings are taken are the most important. If the clone can survive the initial shock then your chances of success improve greatly. So make sure temperature is constant. I pack my clones in a thermal plastic called foam core. It keeps heat in, cold out. The foam core is placed around two cutting trays. Each cutting tray has 36 two-inch cubes, for a total of 72 clones in each box.

After the clones are in place, the box is covered with clear plastic and put under a four-foot, two-tube shop light. One bulb is a soft white and the other a wide spectrum. A heater pad is placed underneath the cutting trays. The heater pad keeps the clones at a constant temperature.

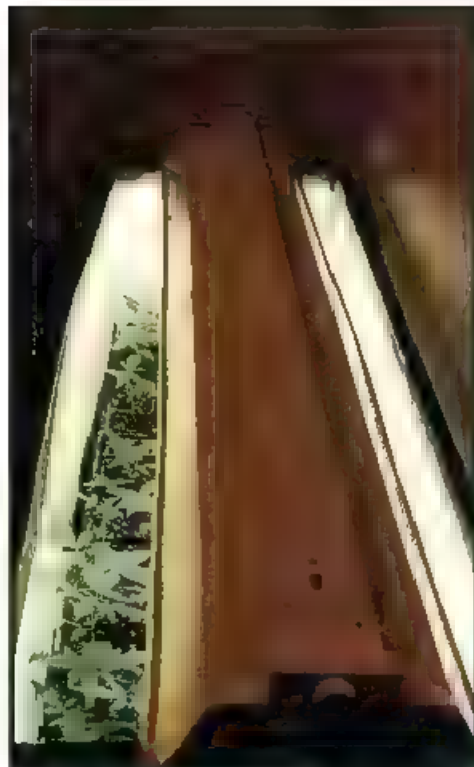
A fogger unit is placed in the center of the box. The fogger has both hour and second timers. The fogging formula is five times in a 24-hour period, for three seconds each time. After four days of five times per 24-hour day, I drop to three times per 24-hour day.

When the leaves start to turn yellow around the edges, I stop fogging. This means the clones have rooted and they no longer need water intake through their leaves.

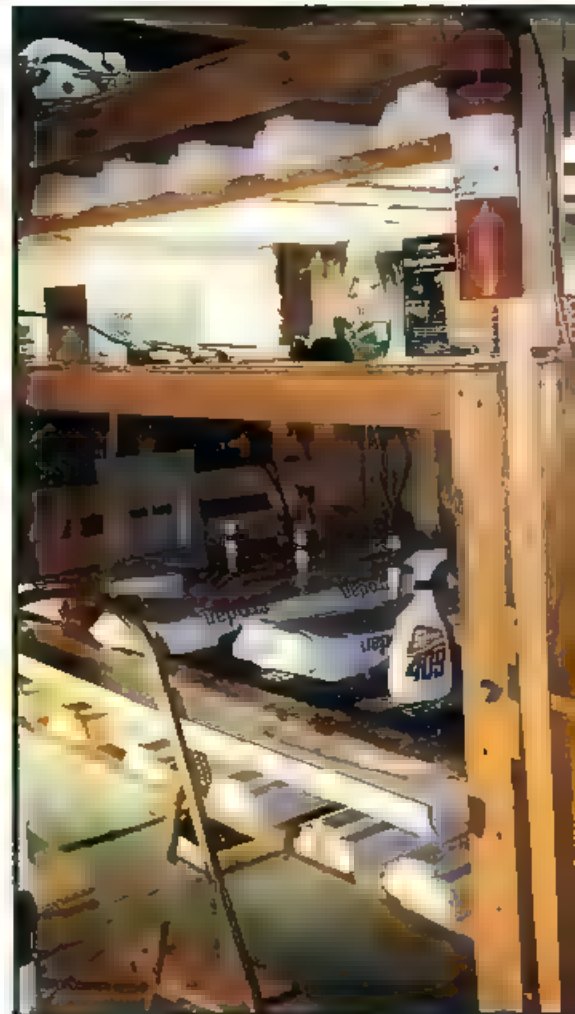
CO<sub>2</sub> injection is a must. The clones should be injected for a minute every half-hour throughout the cloning process. With all these things working, you should have close to 100% success, no matter if clones are from a growing tip or a fully budded tip.

One more helpful hint. After taking cuttings from your best plants, put them in very cold water. This causes clones to stiffen. You can even put them in a refrigerator and store them for a couple of days without harm. Before planting, roll the clone stem in Rootone and water the soil in a cutting tray with Nitron-A 35.

*After three weeks, the clones are ready to go under a 1,000 watt halide.*



*Foam covered clone box with rooted clones.*



*Cloning table.*





## PLANTING

Water the cutting tray from the top side with Nitron. Make sure the soil is wet all the way through. Take a knife and cut a slot in the soil, and wiggle the knife from side to side to open a slot for germinated sprout, approx 1 1/2" long. Put the sprout in open slot with leaves or leaf cover popping out of the soil, close the slot and your sprout is already up and growing. Now we're ready for another amazing product which is sprayed on leaves every week throughout the life of the plant: Spray & Grow. This is the most amazing product I've ever tested. It makes buds sweeter and tastier. Another spray that works well is V-F-11. It is sprayed on leaves every week. Do not mix the two and spray at different times.

Water lightly every day, and once a week add a nutrient solution to the water. I keep my lights on 9 1/2 hours per day and shut them down one day out of the week. One more product will assure your plant's health throughout the grow period, an organic bug killer called diatomaceous earth with pyrethrins. Dust it lightly on the plants to ward off spider mites.



*Diatomaceous earth duster blower.*

## SOIL

After seed selection, soil is the next most important key to successful growing. After a year of experimentation with over a hundred



*Buds after four weeks under 1,000 watt halide.*



*Another 48 one-gallon pots will fit around the perimeter of this system, for a total of 148 pots under one 1,000 watt light.*

different mixtures, I've settled on the following formula: 50% Supersoil, 15% perlite, 15% forest humus, 15% Canadian sphagnum moss and 5% bat guano.

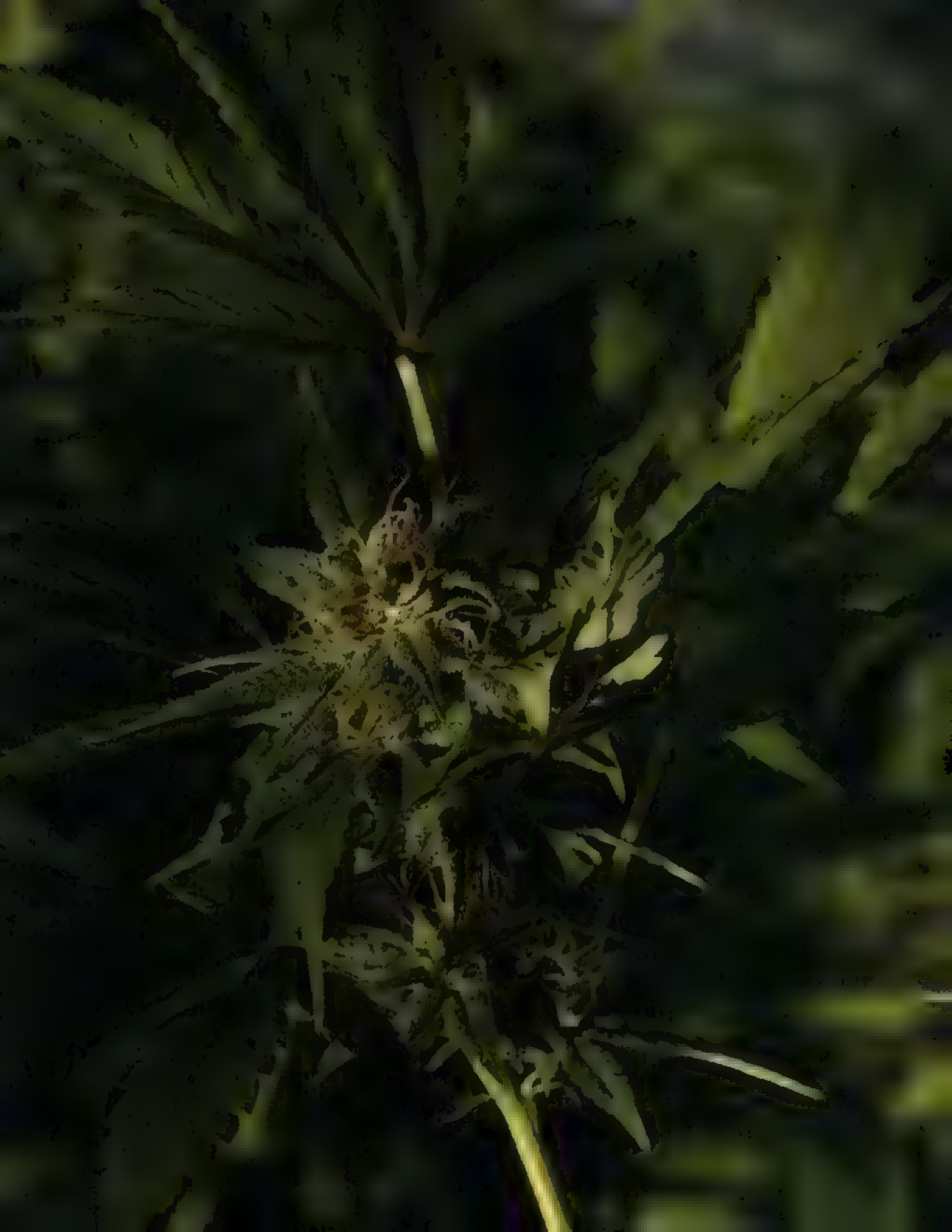
The soil is put into starting trays

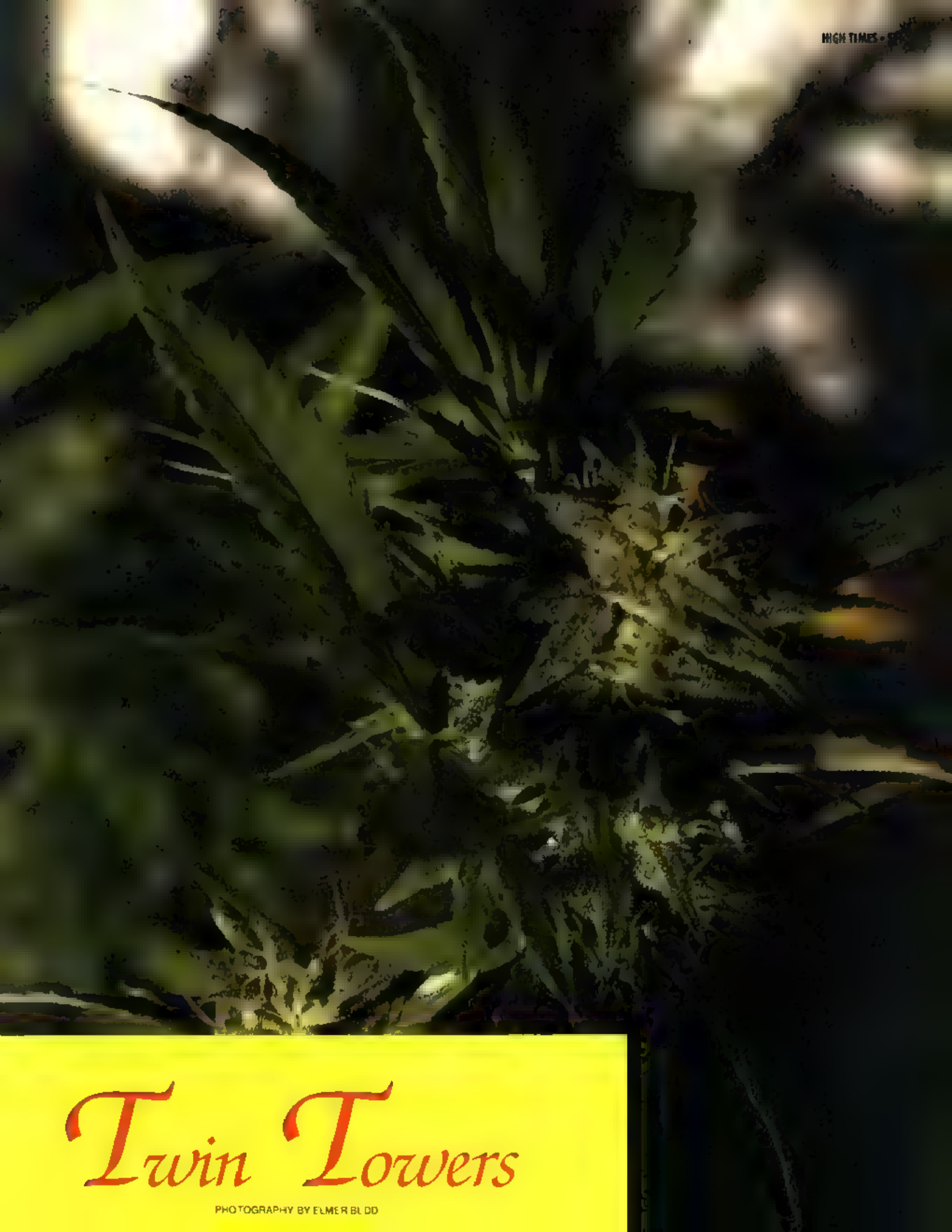
with 36 two-inch cubes in each tray. These cubes are inserts that go into a water tray. The soil is then watered with Nitron A-35, which acts as an activator to make nutrients more available to the plant. ●





*The dried buds average seven grams and I harvest four such buds out of each pot.*

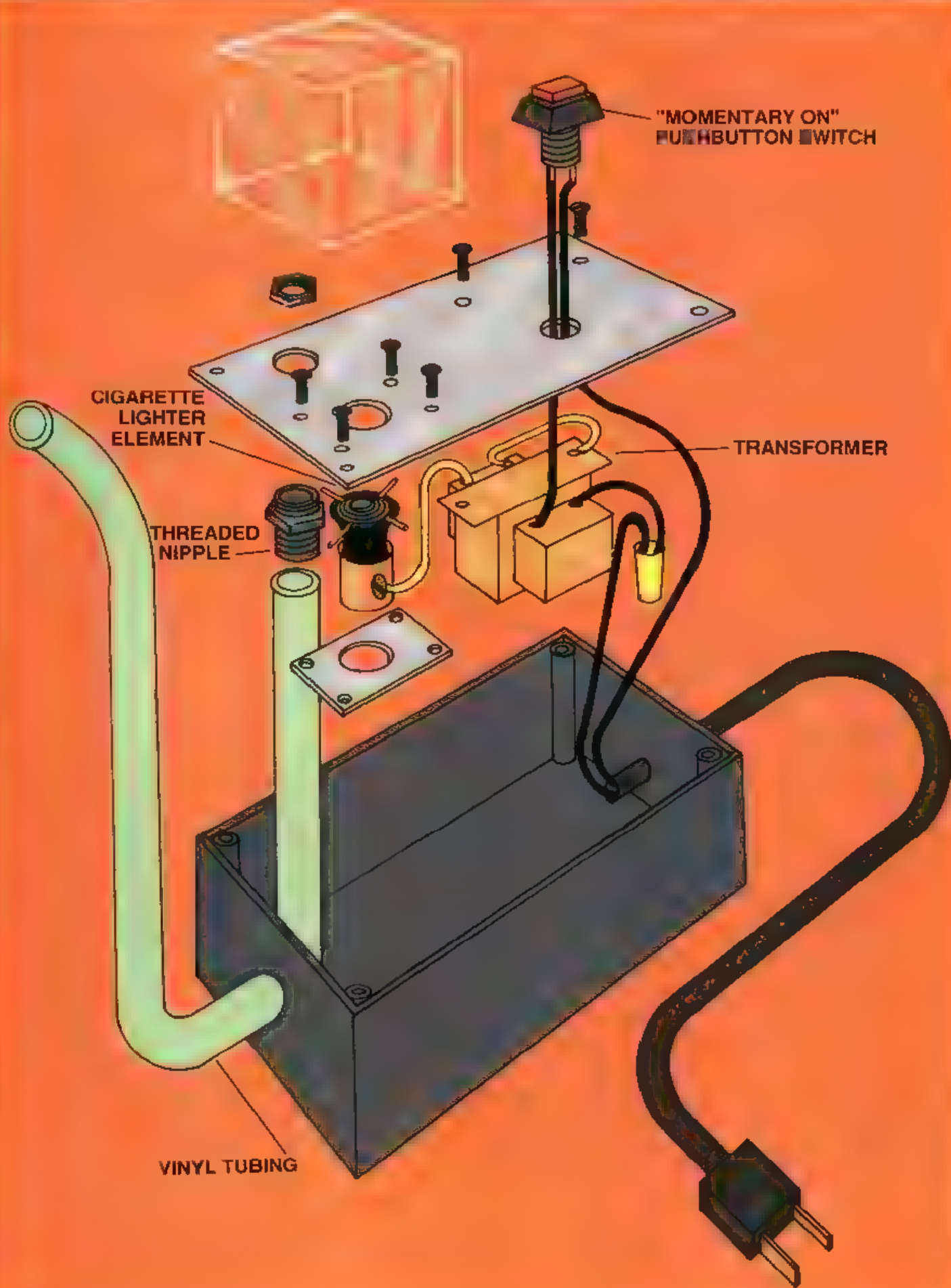




# *Twin Towers*

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LIGHTER  
ELEMENT

TRANSFORMER

THREADED  
NIPPLE

VINYL TUBING

# JANUARY

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FRANK MAX



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FLICK FORD



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# HIGH TIMES

## 1990 CALENDAR



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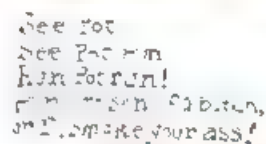


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## 351

CAPTAIN W. H. Z. C.

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DATE: 11/11/2011





**by Dr. Lunglife**

**In the May 1989 issue of HIGH TIMES, Dr. Lunglife explained how to extract oil from cannabis, and how to construct and use an oil vaporizer using the bare filament of a 12-volt light bulb. This article presents a new vaporizer that, while designed primarily for oil, is far more durable and also more versatile, because it can also vaporize the active ingredients of hashish and marijuana without combustion.**

#### **WHY VAPORIZE RATHER THAN BURN CANNABIS?**

Overall, the psychoactive products of cannabis (marijuana, hashish and the essential oil containing THC) are the safest drugs known to man. No person has ever died from cannabis poisoning. It has been estimated that in order for THC poisoning to occur, an individual would have to ingest at least seven pounds of marijuana. And this estimate is conservative--the DEA judge who recently recommended that marijuana be categorized as a prescribable drug stated that recent research put the lethal dose of marijuana at 1500 pounds. Whatever the true dose, it is clear that cannabis has an extraordinary safety margin in terms of acute toxicity.

However, when marijuana is burned it does produce by-products, some of which have been shown to

produce cancer in laboratory animals. Any plant material when burned will produce harmful smoke containing carbon monoxide and a variety of compounds that collectively are called "tar." Chemical studies comparing marijuana to tobacco smoke have shown similar concentrations of most "tars." This suggests that smoking marijuana could also lead to lung cancer. In fact, a given amount of marijuana may be more harmful to lungs than the same amount of tobacco, because pot smokers typically hold smoke in their lungs longer, in order not to waste anything. A reasonable estimate is that, due to the way it is smoked, a marijuana cigarette has four times the "tar" as a same-sized tobacco cigarette. The worst ingredients are created during incomplete combustion and include the strong carcinogens benzopyrene, benzantracene and nitrosamines. Other toxic molecules created during incomplete combustion include hydrogen cyanide, nitric oxides, acetaldehyde, toluene and phenol.

Fortunately, technology can help remedy the situation. The R. J. Reynolds tobacco company recently test-marketed a cigarette that heated tobacco rather than burning it. Only the tip of the cigarette burned, providing a stream of hot air. Unfortunately, this idea (or its taste) did not prove popular in test markets. This is unfortunate, because every one of the carcinogens cited in the previous paragraph was reduced by at least 93% compared to an average cigarette, thereby making tobacco use safer. The one ingredient not reduced was carbon monoxide. Unfortunately, the hot tip produced carbon monoxide when it burned.

By vaporizing the THC within marijuana or hashish with an electric heating element, all of the dangerous products of incomplete

combustion can be eliminated, including carbon monoxide. Electrically vaporizing marijuana can reduce the health risks of medical THC use, by giving a more pure product and eliminating the heat, carbon monoxide, and "tar" drawbacks. In fact, the vaporizer described in this article could also be used with the synthetic prescription version of THC, sold under the brand name of Marinol. Doctors can now legally prescribe this drug for patients suffering from the unpleasant side effects of cancer chemotherapy, and it's being considered for other legitimate uses as well. I see no reason why a capsule of Marinol could not be placed on the heating element providing an aerosol alternative to swallowing pills. Nauseous patients may have difficulty swallowing, so this may be a welcome alternative for many. Dr. Lunglife asks that any patients who ingest prescription THC using the vaporizer method to report back to HIGH TIMES and the medical community.

Again, the goal is to eliminate carbon monoxide, and to reduce heat and the breathing of "tars" which are present in all burning plant material. By heating cannabis material without using flame, the safety factor is increased, which will make marijuana more acceptable for medical and personal use.

Another advantage gained by avoiding the high heat of combustion is economic. Studies have shown that only half the THC is pyrolyzed (burned) in a marijuana cigarette. Smoking is still three times more efficient than eating marijuana, meaning that it takes three times as much to get the same effect if eaten. But if a person were to vaporize the oil rather than burn it, the half of the THC that would have been burned and wasted then becomes available for its intended psychoactive effect. Of course in practice some THC will still be lost,

*continued on page 58*



BY ED ROSENTHAL

# ASKED

## PLANT OF THE MONTH



Summer's over. Time to pack it up and move indoors.

--Tut

Wintersville, OH

## THC DEFENSE MECHANISM?

Is the THC in marijuana, which gives the "high" effect, a defensive mechanism on the plant's part? Was it meant to keep people, animals, birds, away by getting them stoned? If it is, I don't think it's working.

--Paul B. High

Tonawanda, NY

Marijuana probably uses THC as well as the resins for several purposes. It starts to produce THC shortly after germination. Production increases as the plant

matures. The greatest concentration of THC occurs around the mature flowers and maturing seeds. In other words, THC production increases as the plant's investment increases--as it has more to protect.

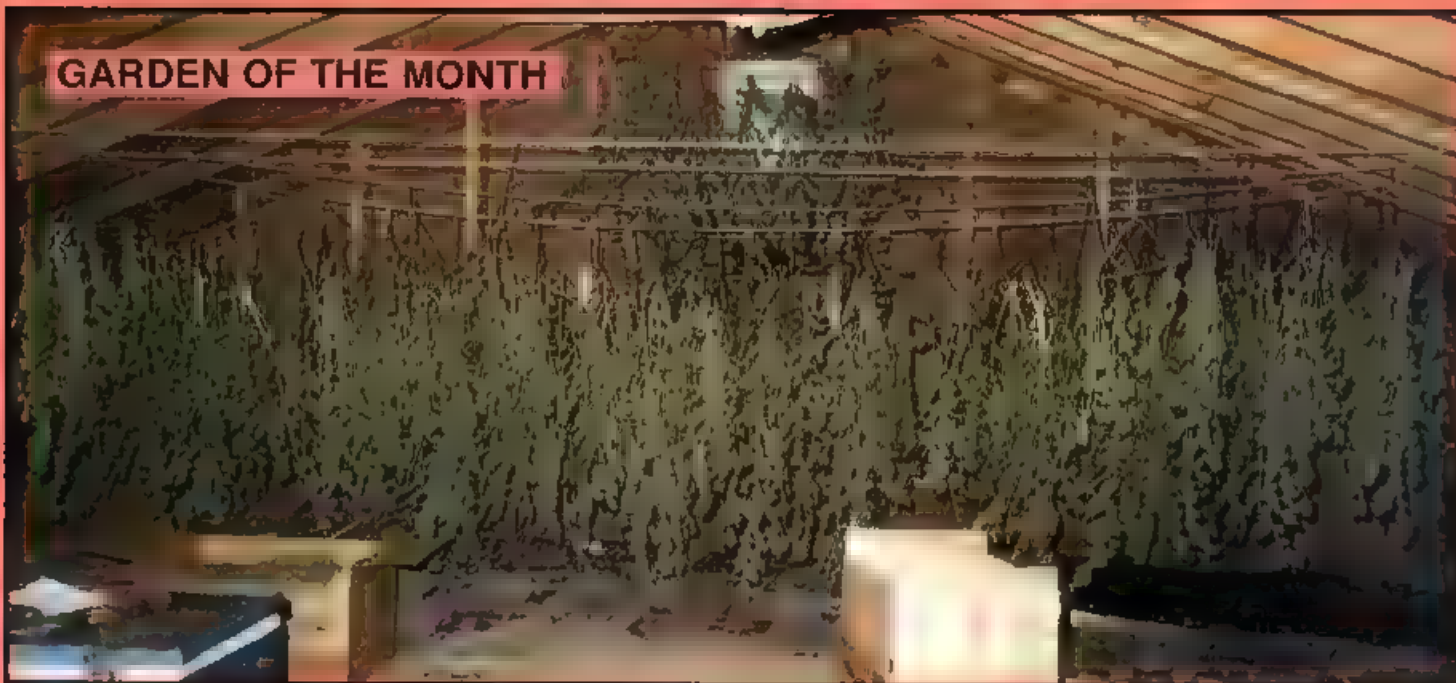
Gnats and other small insects are often physically trapped by the resins. The odors wafting from plants repulse some animals. THC performs a similar function. Predation of flowers and immature seed injures the plant's chance of reproducing. THC repulses some animals which

quickly learn that marijuana ingestion equals disorientation. Once the seeds mature, the seeds pop out of their protective pods and may be ingested by animals which spread them to other areas.

THC has antibiotic qualities too. Thus it helps prevent bacterial infection.

THC production is also related to light spectrum and seems to protect plants from certain spectra of UV light. This will be covered at length in an article in the near future.

## GARDEN OF THE MONTH



Buds are good and big in Northeast Iowa. I've been growing for five years. In '87 my friend and I got the fever Big. We harvested ten pounds of bud, some hybrid and some from the Ho land Dude.

I start my plants indoors on St. Patrick's Day, set them out on May 1. I use organic fertilizer and harvest just before deer season.

--Bud Man  
Waverly, IA

## MARIJUANA SLEEPVILLE

I am 24 and am not enjoying smoking as I used to. The reason is that it has begun to make me very sleepy. Whether I smoke one toke, or share a joint with a group of friends immediately after smoking it I am worthless. If I don't fall asleep, which is usually the case, I end up sitting on the couch, my eyes glazed over, unable to move, much less carry on a decent conversation. I love the taste of pot, sitting around with my friends in a bong session and I love being able to relax, but not to the point of being comatose.

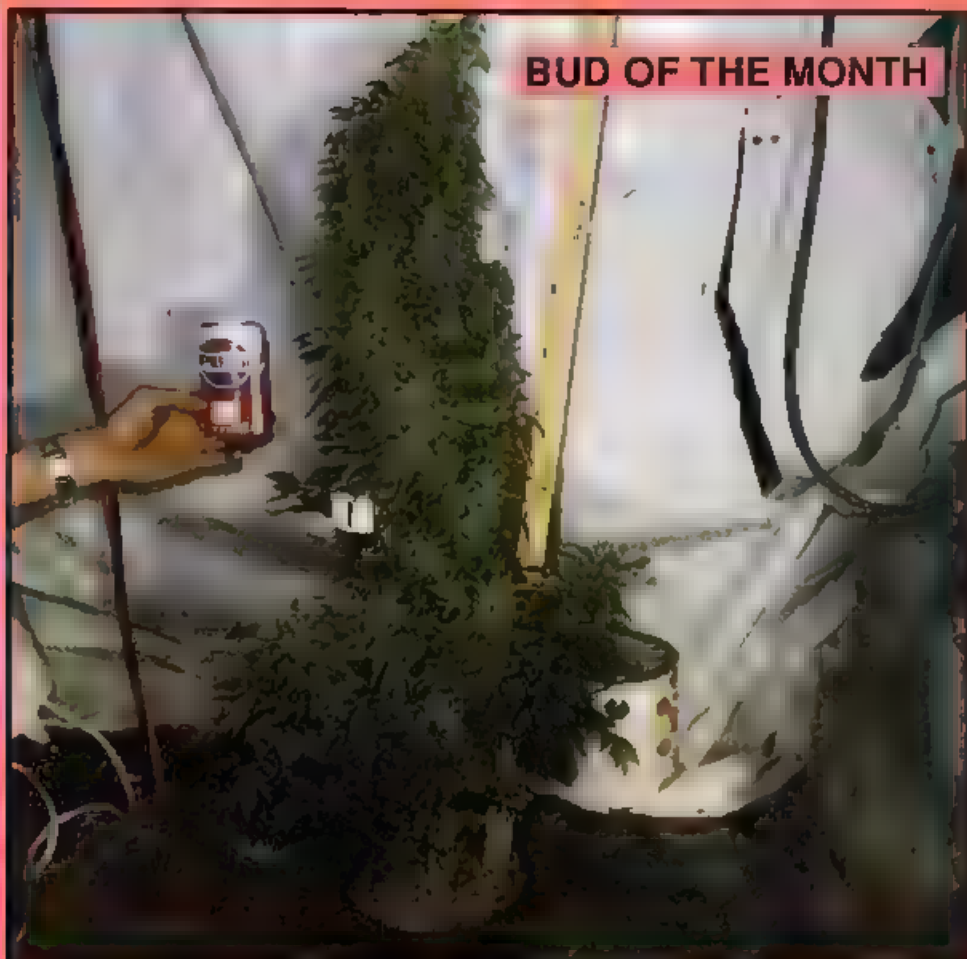
The only thing that I can relate to this change in my reaction to smoking is a change in my metabolism, as I used to be very slender, and now I weigh almost 30 pounds more than I did as a teenager. Can metabolism change the effects of marijuana?

--A Sleepy Smoker  
Huntsville, AL

According to Dr. Todd Mikuriya, noted Berkeley physician, the change in your body weight is the cause of your drowsiness when you smoke. Dr. Mikuriya suggests a course of exercise and dieting to return to your previous weight. Then you will be able to get high without getting knocked out.

*continued on page 57*

## BUD OF THE MONTH



This skunk plant was grown with 12 others under a 1000 w HPS. It weighed 9 1/2 ounces dry.

Robust Rob  
Anchorage, AL





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# ASK-ED

continued from page 55

## MH VS. HPS LAMPS

Do HPS lamps produce a better light than MH lamps?

~J.M.  
Pineville, LA

The lamps have slightly different effects on the plants. Plants grown under HPS lamps stretch slightly so they have a longer internode. They mature 5-10 days later. On the other hand, the lamp emits more light so that plant growth and bud size increases. Some people think that the increased red spectrum light of the HPS encourages flower production.

## MINIMUM LIGHT FOR FLOWERING

I read some articles and comments in HIGH TIMES which have piqued my curiosity about high pressure sodium (HPS) light intensities, and their effect on proper bud development.

In the Oct. '88 HT you responded to a letter by Plantelet, stating that a minimum of 1500 lumens was required to produce viable seeds. In his article, "High Tech, High Light" (HT, Sept. '87), Jorge Cervantes states that "...1000 to 2500 footcandles (fc, equivalent to lumens) are needed to produce healthy flowers." Assuming that strong flowering and viable seeding require similar levels of light, Jorge is allowing a lower minimum limit. Who's right? Have studies been done? And what type of measuring did you and Jorge use?

Also in the Oct. '88 HT I noticed an ad by Geotechnology which, like Jorge's article, charts the average footcandles in an area. Jorge was more specific. In both cases, most of the readings fell well below even Jorge's minimum 1000fc minimum, using 1000 watt halides placed 36"-40" from the MINIMUM measurement point.

Jorge's figures indicate two important facts about indoor lighting. The first is that the reflectors tested do not reflect the light evenly or symmetrically. Manufacturing companies should spend some more money on research and design.

After seeing the strange light dispersion figures obtained by most reflectors, I ran through some numbers to construct a

continued on page 71

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## VAPORIZER

continued from page 53

even in a vaporizer, since some will get on the surfaces of the tubing and other vaporizer parts. But overall, vaporizing is nearly twice as economical as smoking.

### THE BASICS OF THE NEW HIGH TECH VAPORIZER

The step-by-step directions given below may seem complicated, but the vaporizer is actually quite easy for almost anyone to build. The cost is under \$17 and it takes about one and a half hours to construct, from easy to obtain parts. Simply stated, an automobile cigarette lighter heating element gets 12-volt power through a small transformer, with the amount of heat being controlled by a push-button switch. The vaporized THC is held in an overturned cup and then inhaled through a tube.

### BUYING PARTS FOR THE VAPORIZER

The new vaporizer can be made from standard parts easily obtainable at Radio Shack, auto parts stores, and hardware stores. The vaporizer is based on the standard automobile cigarette lighter element used in the majority of American cars. Two lighter elements made by Casco, an American company, can be easily adapted, models 212144 and 212160. Each costs \$3.99. Electric power is controlled by a "momentary on" push-button switch, several types of which may be purchased at Radio Shack (such as catalogue #275-1566, costing \$1.89), or a doorbell button may be used. The 120-volt house power is transformed to a safer 12.6 volts by a Radio Shack 1.2 ampere power transformer, catalogue #273-1352 costing \$5.79. The transformer is encased in a Radio Shack 6" x 4" x 2" plastic experimenter box with an aluminum top, catalogue #270-627, costing \$2.59. Other parts include a standard six-foot electrical cord with a two-prong plug (\$1.50), four short (1/8") pieces of 1/16" diameter wire, a two-foot length of 3/8" o.d. vinyl tubing, several twist-type electrical connectors, and a 1/2"-long threaded nipple and two matching nuts, which are used in guiding power cords through lamps. The transparent plastic cup that holds the vapor before being inhaled through the tube can be purchased at grocery stores, a Rubbermaid 4 oz. square clear storage container, #8193, costing \$2.99 for two. Necessary tools include a drill with

several bits, including a 5/8" bit (a drill press helps), screwdrivers and a soldering iron. The soldering iron can be eliminated if a push-button is used that has screw terminals. If you are not familiar with electrical connections, please have a qualified electrician construct the electrical portion of your vaporizer.

### CONSTRUCTING THE VAPORIZER

To construct the vaporizer, the only unusual task is preparing the heating element. When it comes from the auto store, it is encased in a metal jacket which must be removed. This can be done by straightening the three bent tabs at the bottom. Remove the outer jacket, the spring and another jacket, leaving the heating element and a cylinder of steel, which is separated from the outside of the heating element by mica insulation which cannot be seen. When in use, the electricity will flow from the bottom cylinder, to the center of the heating coil, out to the edge of the heating element and through the aluminum box-top which holds most of the parts together.

After the heating element is bare, the second step is to drill a small hole near the end of the bottom cylinder through which a small machine screw will screw into a nut. This small bolt will serve as one electrical connection to the heating element. Be certain that the machine screw will not touch the copper rod inside the cylinder. The heating element is attached under the aluminum cover by a 1 1/2" square scrap of aluminum flashing, using four machine screws and nuts through holes drilled near the corners. Both the small square and the aluminum cover have a 5/8" hole drilled through them, the hole being in the center of the small square and toward one corner of the aluminum cover (see the diagram). It is best to drill both the square and the cover at the same time so that all five holes match. To put it together, first draw the small aluminum square up around the base of the heating element, and loosely attach it to the aluminum cover with the machine screws and nuts. In the space between the heating element and the aluminum cover, place the four short pieces of wire. These wires keep an air space around the top circle of the heating element, allowing air to carry the vaporized THC. Be certain that the cylindrical base of the heating element does not touch the aluminum cover, then tighten the four small machine screws and nuts. Next, insert the small machine

screw and nut which will be the electrical connect on to the cylindrical base of the heating element. The rest is easy. Using a 3/8" drill bit, drill holes in the aluminum top for the push-button, the tubing connection near the heating element, and through the plastic box at one end. Then drill a smaller hole through the other end of the plastic box to allow the power cord to go through. Using a small bit (depending on the size of your small machine screws), drill holes to attach the power transformer. Determine the locations of the holes by placing the transformer against the aluminum top and marking the correct spots with a pencil. Then attach the transformer with screws, attach the push-button and install the threaded nipple under the aluminum cover, with the nipple being held in place with nuts top and bottom. The vinyl tubing goes through the plastic box and over the nipple within the box.

The electrical connections are simple, but take care to do a good job, to avoid the possibility of shocks or short circuits. First, push the 120-volt wire from the house plug through the small hole in the plastic box. It is a common practice to make a simple knot in the power cord just within the entry hole to prevent tension on inside wires. The "hot" wire from the plug (the smaller blade) goes to one push-button contact, then a wire goes from the other push-button contact to a black (primary) transformer wire. The other black transformer wire goes to the second wire from the plug. There are three secondary wires going from the transformer, one black between two yellow wires. Cut off this black wire close to the transformer. One yellow wire attaches to the machine screw connector already drilled in the cylindrical base of the heating element. The other can be attached at any screw that touches the aluminum cover, such as one of the screws that holds the transformer in place. Before attaching any of these wires, trim their lengths so that there is no excess wire to get in the way and possibly get near the heating element. Next, place the vinyl tube through its hole in the plastic box and push it over the threaded nipple. The final job is to check all wiring for good connections and no short circuits, and then to attach the aluminum cover to the plastic box with the screws provided.

### USING THE VAPORIZER

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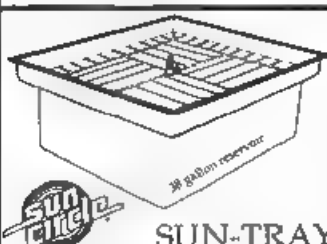
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## VAPORIZER

method), hashish or powdered marijuana on the heating element coil. Press the button and the coil will heat. Vapor will begin to rise and collect in the plastic cup above the heating element. Take your finger off the push button before the heating element glows red, or it will get hotter than necessary to vaporize the THC oil and start combustion. If this occurs, don't sweat--the vaporizer will then be acting as a regular pipe, burning the marijuana. Simply learn how long to keep the button down to vaporize the THC without burning. Enjoy the relatively cool and pure THC vapor in moderation.

There are a few special recommendations to users of Marinol, the prescription form of THC that helps cancer patients nauseous from chemotherapy. The first is that the three dosages of Marinol, 2.5, 5 and 10 mg, all come in the same-sized spherical capsule, mixed with sesame oil. My advice is to use the 10 mg. capsule, so as to decrease the amount of sesame oil vaporized. Cut the capsule and drain the oil into the vaporizer's heating element. When the element becomes hot enough that the oil starts to vaporize, immediately cut the power. The element will retain enough heat so that a little more oil will vaporize, but you do not want to vaporize too much at a time. Wait five or ten minutes to see what effect the amount you inhaled will have. Remember that the capsules are designed to be swallowed which is three times less effective than smoking, and smoking is two times less effective than vaporizing. Consequently, one capsule when vaporized may be equivalent to six capsules when swallowed.

Dr. Lunglife hopes that his vaporizer will make life easier for the many chemotherapy patients who find it difficult to swallow pills. If vaporizing Marinol works for you, or if vaporizing marijuana helps you cope, tell your physician and please write to HIGH TIMES.

I give these instructions with two cautions. The first is that while the vaporizer could be modified to run off a car battery, this is not recommended. Although driving under the influence of marijuana is certainly not as dangerous as under the influence of alcohol, Dr. Lunglife asks that you drive only when fully alert. Your life is not the only one in your hands when you drive. The second caution is that Dr. Lunglife knows that his new invention can also be used to vaporize the active

ingredient in tobacco. Although this method would add to safety in that carbon monoxide would be eliminated and the dangerous products of combustion reduced, the vaporizer will deliver a large dose of nicotine. This drug, although legal, is more addictive than illegal drugs. Once a person has a tobacco addiction it is difficult to quit, due to the long withdrawal cravings. However, if you are already a tobacco addict, the vaporizer may be worth trying for the sake of your lungs.

### DR. LUNGLIFE'S PHILOSOPHY

Cannabis is a sacred plant, giving us the ability to more easily feel the spirit within our body and to increase our enjoyment of the beauty without. This increase in awareness, in combination with marijuana's tranquilizing effects (the difference between cannabis and the pure psychedelics such as LSD and sacred mushrooms) can be a very spiritual experience. This is much better than the sensory and intellectually dulling effects of alcohol. It helps Dr. Lunglife relax after (after!) a stressful workday, raising the quality of his life. He firmly believes that it should be legal for personal use, and asks that anyone who uses the vaporizer plan to contribute \$25 to NORML or any other organization working to end marijuana and hemp prohibition. Look in HIGH TIMES for the addresses of these socially responsible organizations necessary to end the war on marijuana people, which has resulted in over seven million arrests. Dr. Lunglife asks that marijuana people be left in peace to enjoy their liberty.

However, it is only realistic to know that this will not happen without political struggle. We must assert our right to do as we wish as long as we hurt nobody but ourselves. The authorities are doing all they can to classify marijuana with more dangerous drugs and to call all users criminals due to the ugly drug trafficking violence. The only way to avoid paying smugglers is to grow it yourself. When the time comes that United States citizens supply most of our own demand for marijuana, much of the stigma will be gone. So grow your own, enjoy it safely, and work politically to end the ugliness of the war on people who use drugs. Dr. Lunglife believes that our drug problem will be better solved using education and treatment rather than the criminal system. After all, isn't liberty the central value that made America great? ●

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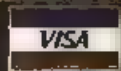
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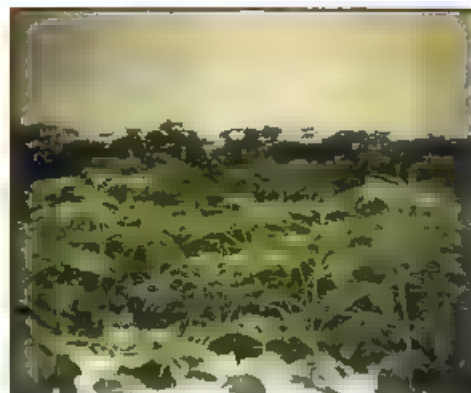
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# ASK-ED READER REPORT

I have a 14 light system using 1,000 watt HPS lamps. There are two large budding rooms, six vegetation rooms, and one seedling closet with fluorescent lights. All have air intake and outflow vents, fans for circulation, and wind simulation for stronger stems to hold the buds better without staking.



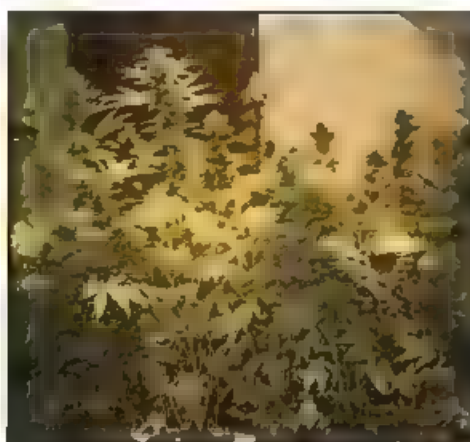
*I start the seeds in paper towels. Once they germinate I transfer them to trays. I get a better survival rate this way. They stay in the trays a minimum of one week, but they can stay as long as six weeks, if needed. Then I transplant them into two-gallon pots, using a soilless mix for the duration.*



*The plants stay in the vegetative rooms for six weeks. At six weeks they start their rotation into the sexing corner and new seedlings take their place. This rotation makes replanting smaller scale than having to do all the plants at once.*



*The sexing area is a low light corner of one of the main budding spaces. Then the plants are moved under more intense light.*



*The budding cycle lasts six weeks. These plants are ready to harvest.*



*After the top buds are harvested I leave the plants in the room for the lower buds to ripen.*



*The seed room. I use Skunk and Skunk/Big Bud hybrid females and Skunk males to pollinate. This combination yields a bigger bud within a shorter time.*



*The finished product. The buds are very dense with good color and a kickass buzz.*







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# What a Long Strange Trip it's Been



# A HIPPY'S HISTORY OF THE SIXTIES AND BEYOND

By Lewis Sanders

Last month's account of HIGH TIMES founder Tom Forcade's life described the surveillance and harassment he endured from the government, and the infiltration of radical groups by FBI agents. A new book, *What A Long Strange Trip It's Been: A Hippy's History of the Sixties and Beyond*, goes into greater detail on these kinds of activities. It focuses on events from John F. Kennedy's assassination in 1963 to Watergate from the perspective of the counterculture, with occasional forays into the history of the world, and a brief look at the events of the recent past. As our story begins, JFK has been assassinated for pulling the plug on the CIA/Mafia inspired Bay of Pigs operation, Timothy Leary has begun turning the world on to LSD, and the psychedelic revolution has inspired a new wave of rock music, from the Grateful Dead to Jimi Hendrix to Cream to Jefferson Airplane (available from **Straight From The Hip Press, Inc.**, PO Box 8005, Suite #316, Boulder, Colorado 80306).

With all this happening right out from under them and LBJ bowing out of the '68 Presidential race, the known unknowns behind the throne had to scramble fast to peruse a plan which would keep them in power. True to their nature it was assassination to which they turned once again.

Just four days after Johnson sung his own swan song, Martin Luther King was murdered in Atlanta by an assassin of the unknowns. This was not only instrumental in stemming the ascending tide of Black Power in America and halting the rise of a "Black Messiah" with which the F.B.I. & J. Edgar Hoover were so obsessed, but it set the stage for the most important assassination of them all--Robert Fitzgerald Kennedy.

For it was Bobby Kennedy who was the real Messiah--none of us who really knew this ever doubted it, and we watched as he was nailed before our very eyes. He was the best we had to offer, and the best I'd ever seen, with eyes fixed long and hard upon the horizon both then & now. He could have brought Peace to the entire world (...if anyone could).

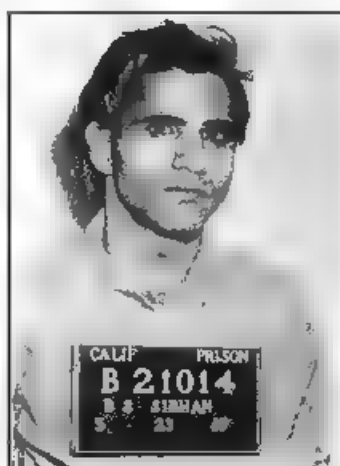
Whatever excesses he displayed in his brother's administration he tempered with age and his own awakening.

Bobby took L.S.D. too, and reportedly was turning on U.N. diplomats on the side. He led efforts to legalize L.S.D. research after his wife received successful therapy and in his words "it can be very, very helpful in our society if properly

*"Bobby took L.S.D. too,  
and reportedly was  
turning on U.N. diplomats  
on the side."*

used." I've no doubt that the world would be a totally different place for the better had Robert Kennedy been elected President in 1968. And he would have, if he hadn't been blown away.

A master checkmate for the Darker Forces. (Enter Richard Nixon.) RFK's killing was a set-up too. After just winning the all-important California



*Sirhan Sirhan (left) was convicted of assassinating Robert Kennedy (right), but was he the lone gunman?*

primary and giving his victory speech, he was led from the podium thru the kitchen pantry to where Sirhan Sirhan served as a diversionary gunman. In the confusion Kennedy was shot 4 times directly from the rear, the fatal wound being fired from just three inches from the back of the head above the ear. The true assassin was named Thane Eugene Caesar, a last-minute security guard stand-in with mob connections who disappeared directly after the killing.

Sirhan himself was the fall guy, was tried & put away. Another case of the lone, crazed assassin. But not quite.

The assassination of Robert Kennedy was the result of years of research and hard work by the C.I.A. in the area of mind control and behavior modification thru drugs & hypnosis, specifically hypnotically controlled assassins. Sirhan Sirhan was hypnotically programmed to assassinate Robert Kennedy by a Hollywood psychiatrist named William Joseph Bryan, Jr. Bryan worked extensively with the C.I.A. and in this case went as far as having Sirhan stay at his ranch for weeks while being programmed. At the time of the killing, he was waiting outside the back door of the Ambassador Hotel in his pick-up truck and horse trailer to be used as the getaway vehicle if necessary. Bryan was also the Hollywood



consultant to the movie "The Manchurian Candidate" about a brainwashed assassin programmed to kill the President.

Bryan also bragged of having programmed Arthur Bremer, the assassin who shot and paralyzed right-wing Presidential candidate George Wallace in the 1972 Presidential campaign to once again narrow the field for Richard Nixon.

Others, too, were glad to see the passing of Robert Kennedy. Like the Mafia, Kennedy had been extremely hard on organized crime when he had been Attorney General, and the fact that his work helped throw Jimmy Hoffa in jail in 1967 did nothing to endear him to the mob.

Elements of the United States government from the various Presidents, to the Attorney Generals, to the F.B.I., to the C.I.A., to the Army, to the dozens of other government & military intelligence agencies, to those who have pulled the triggers, have conspired and actively executed policies which were clearly criminal in their attempts to keep themselves in control and the emerging youth culture from taking on political form and power.

John Lennon, for example. The murder of John Lennon, like Robert Kennedy's before him, was the apparent successful result of the C.I.A.'s MK-ULTRA mind control assassination program. Mark David Chapman exhibited all the outward

years before in Britain, but he finally won his American residence in July 1976. They were especially hot to get Lennon because he was one of the few people of his time (along with Bob Dylan) who could have walked down the street and singlehandedly led the revolution, any time, any day.

John & Yoko had started hanging out with Jerry Rubin & Abbie Hoffman, had done their infamous Bed-ins for Peace, and were getting deeper involved in the New Left political scene. It was Lennon who thru his efforts & benefits got John Sinclair (leader of the White Panther Party & co-founder of the band MC5) out of jail after he'd been given a horrendous 10 years for possession of two joints of grass. Lennon had also planned to attend the counterdemonstration at the 1972 Republican Convention in Miami but due to massive police harassment, surveillance, his fear of getting assassinated by the government, and the probability of massive police violence against the demonstrators, Lennon refrained from going or calling the ranks of discontented youth to the debacle. In 1980, after years of solitude, Lennon cut a new disc & planned a world tour. So John's number came up on the list and the lone crazed assassin from nowhere was prepared to dispense with his enemy of the state. And did.

Mark David Chapman.

A religious boy who supposedly developed a festering hatred for Lennon after John had proclaimed the Beatles more popular than Jesus. But was there more to it than that?

It seems that Chapman had worked at a Haitian refugee camp in Ft. Chafee, Arkansas run by the World Vision Organization. World Vision works with refugees around the globe and published reports suggest it's in part a convenient worldwide cover for the recruitment & training of C.I.A. assassins to be used on targets wherever deemed necessary. It's World Vision along with Carl McIntyre's International Council of Christian Churches & others who moved into Jonestown after the Jim Jones death trip went down there, but this time its residents are Laotians who were mercenaries or opium growers for the C.I.A. (And, coincidentally enough, John Hinckley, Sr., Bush family friend and father of the ill-fated attempted assassin of Ronald Reagan, was a World Vision official at the time his son missed the mark. And coincidentally enough, a double of Hinckley, Jr. who followed him across the country, wrote letters to Jodie Foster, and was also arrested with a weapon intended he said to kill Reagan. This double was a fellow named Richardson who himself attended the International Council of Churches' Bible Study in Florida.

But Mark Chapman didn't miss, and John Lennon lay dying in the gutter as another pillar of our culture was blown to dust.

In the last 25 years we have seen assassination become government policy, and elements of law enforcement agencies of this country on the highest levels complicit & guilty of the murder of the greatest leaders of our time. But that was only one tactic used in the massive effort to neutralize the Peace Movement & youth culture. Default by decapitation. And the only eyes left watching are the F.B.I.'s.

The F.B.I. was Hoover's ballgame altogether. The political police force of America. Its acts of repression with regards to the civil rights of its own citizens are voluminous, well documented, &



***There is evidence that John Lennon was the victim of a politically-motivated assassination plot.***

tendencies of a hypnotically trained programmed killer. Unemotional, unremorseful, "...and when I saw Mr. Lennon I kept hearing this voice inside my head saying, Shoot him, shoot him, shoot him, shoot him, over & over and the voice wouldn't stop until I did." Then the dude sits down and starts reading *A Catcher in the Rye*--a pure ruse.

Lennon without a doubt had been targeted long ago by the Nixon Administration. The F.B.I. has over 26 pounds of documents in his file and to this day refuses to release them because of "national security" reasons. The Justice Department unsuccessfully tried to keep Lennon from staying in the States because of a pot bust



**J. Edgar Hoover directed the FBI in a coordinated effort against the '60s counterculture.**

appalling. During the '20s, '30s, '40s, '50s, '60s & right up to today, the F.B.I. has been the internal security force of this country: monitoring, investigating, harassing, menacing, & neutralizing many opponents of American foreign policy whose only crime was to be actively involved in the democratic process. It was Hoover's job to see that the power seat of the Military Industrial Complex was not disturbed by organized political opposition from any direction.

The F.B.I.'s main task during the '60s was to stifle dissent, foster violence, & cause trouble. Thru a network of informers, undercover agent provocateurs, and co-ordinated actions with local police, it took to its task with all the vigor & illegalities it required. In 1956 the F.B.I. began its Counter Intelligence Program (COINTELPRO) whose purpose was to neutralize the United States Communist Party, which in itself was an act against all the guaranteed freedoms of belief which this country was founded upon. So when the '60s came around, the F.B.I. was all brushed up on its illegalities and thru COINTELPRO unleashed itself upon the Left in a myriad of ways, all designed in the end to preserve the status quo & bury the Underground. All in all the F.B.I. admits to some 2,340 approved COINTELPRO actions against the New Left.

Homes, offices, & cars were burglarized, phones tapped, mail opened, organizations infiltrated, violence incited, internal dissension fostered, and people murdered to name a few.

The Underground Press took a full frontal assault from the F.B.I. with the aim of breaking the vital communication links among the political young. Underground Press offices were bombed, their staffs harassed especially by local police, their advertisers advised not to continue their support, and their printers pressured not to print

such scurrilous rags in the future. The C.I.A. worked hand in hand with this, dubbing its own efforts against the Left "Operation Chaos" (headed by none other than Richard Helms), and the Army was also used extensively to illegally monitor American citizens & disrupt the Underground Press.

Take the Liberation News Service, for example. Its members were followed, staff infiltrated, feuds fostered, and when that didn't work, the F.B.I. tried to burn down its D.C. office with the staff upstairs sleeping. The F.B.I. was successful in shutting down dozens upon dozens of Underground papers all over the country and in doing so illegally but effectively kept the Movement from spreading even farther than it did.

In an F.B.I. memo of July '68 entitled "Disruption of the New Left" and sent to their field offices in Atlanta, Baltimore, Boston, Buffalo, Charlotte, Chicago, Cincinnati, Cleveland, Detroit, Jackson, L.A., Memphis, Newark, New Orleans, New York, Philadelphia, Phoenix, Pittsburgh, Richmond, St. Louis, San Francisco & Washington, D.C., 12 counterintelligence measures were outlined to be used against the New Left.

Among these were preparation of a leaflet designed to counteract the influence of S.D.S. by showing "the most obnoxious pictures they could of local student leaders...the instigating of or taking advantage of personal conflicts between New Left leaders"; the creating of impressions that certain New Left leaders are informants for the Bureau or other law enforcement agencies, "having activists arrested by local authorities on drug charges"; drawing up anonymous letters regarding individuals' radical activities and sending them to their parents, neighbors, & parents' employers; the confusion & disruption of planned activities by misinformation that the events had been cancelled or postponed could be sent to various individuals; the monitoring of "coffee houses"; exposing faculty members & graduate assistants involved in New Left politics as radicals to the press, Board of Regents, etc.

And this was only the beginning. As the memo stated in the end, the disruption of the New Left "must be approached with imagination & enthusiasm if it is to be successful." This even went as far as hiring a prostitute with V.D. to sleep with several activist leaders at a political gathering in order to further wreak social and political havoc later within the groups.

But again, if violating all guaranteed constitutional rights didn't work, if all stops had to be pulled, murder was also covert Bureau policy.

And as usual, the Bureau's always covered; usually by the President they're currently spying for. Case in point is this very case. When the investigations were finally over concerning the F.B.I.'s illegal break-ins against dissidents, charges were brought against Bureau officials Mark Felt & Edward Miller for ordering these break ins. The men were sentenced to jail but in 1981 were pardoned & commended by Ronald Reagan. And it was Reagan who once again loosened the rules against domestic spying which were implemented to keep such abuses from recurring. So you can bet the F.B.I.'s still at it, as can be seen in the revelations of their monitoring those groups in opposition to Reagan's Central American policies of the '80s ●

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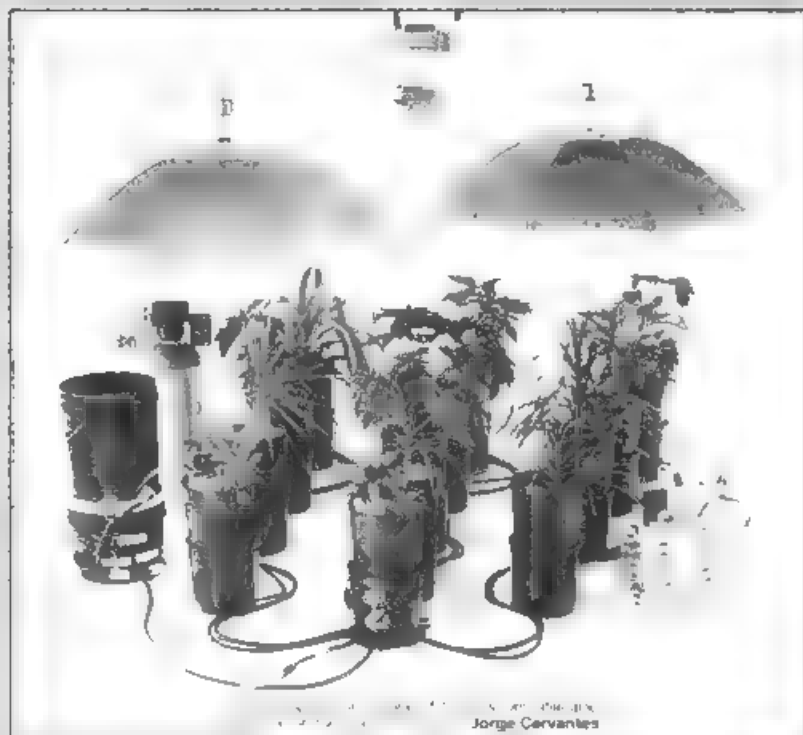
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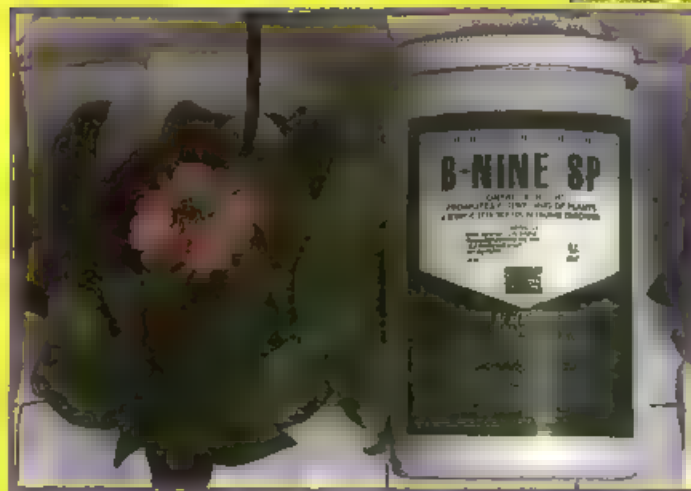


# PRODUCTS



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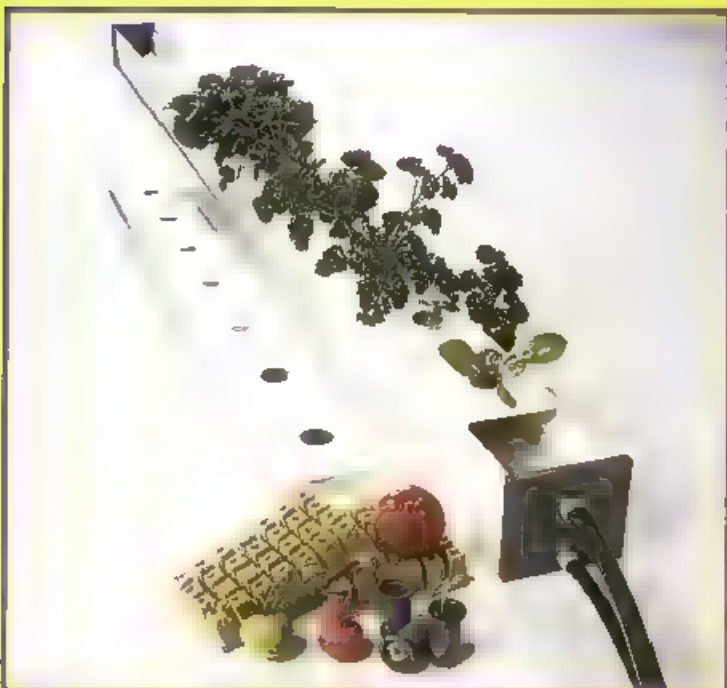
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by Judy McGuire



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# ASK-ED

continued from page 57

mathematical model of light dispersion with a stationary single-point source (like an MH or HPS lamp) 36" from the floor. If the plants receive 100% of the desired light directly under the lamp, at the outer edge of the garden, 4" from the lamp (the edge of an 8' x 8' circle), plants receive only 36% of the light. Light from most reflectors spreads in an ever widening circle, but most gardens are rectangular. Only about 22% of the light reaches the corners of an 8' square space.

Light disperses radially and its intensity follows the inverse squares law. This means that to receive even light, all plants should be at the same radius from the light source to keep the plants uniformly lit.

For plants to receive even light from a single stationary source, the tops should be placed to make a shape like a bowl makes in the snow. With a Sun Circle type light mover, plant tops should be placed in a position like a doughnut's impression in the snow. With a Solar Shuttle the plant tops should form a small valley.

My reason for mentioning all this is that at the beginning of Jorge's article, he asks "How can the Dutch use 400-watt lamps and get the same (or better) results than American growers using the 1000-watt lamps?" His answer is horizontal orientation and small reflectors. He showed that a 1000 watt bulb's lumen output can be increased by almost 3-1 over the no reflector figures. Jorge did not chart any 400 watt bulbs, or even a horizontal 1000 watt MH. Even if the 400 watt can be boosted using a horizontal reflector, at 36" we are still below the 1000 lumen minimum recommended for optimum bud formation. How can a small indoor grower hope to achieve good results with a 400 watt stationary horizontal lamp?

--Professor T.H. Custer  
The Homegrowers (Association) of Connecticut

In a black room which reflected no light, Jorge compared a 1000 watt HPS vertical cone reflector, a vertical parabolic reflector and a horizontal reflector. Jorge's test showed that at 3' height only an area of 13, 29, and 32 sq. ft. received the 1000 fc minimum. The paraboloid reflector delivered 24% more light than the cone reflector. The horizontal lamp delivered 40% more light than the

continued on page 73



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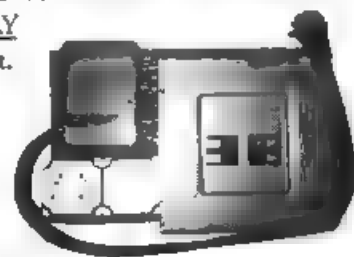
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# ASK-ED

continued from page 71

cone. None of the lights dispersed the light evenly. The area directly under the lamp was the brightest. The light concentration quickly fell off as distance from the center increased.

Jorge's tests are certainly relevant to lighting a space. He showed that horizontal reflectors are much more efficient than verticals. However there are several factors to take into account when figuring the actual amount of light a space receives.

The reflectiveness of the walls plays a part in determining how much light gets to the area. This is more important with smaller gardens, which have a higher perimeter to area ratio. A highly reflective surface directs ambient light back into the garden. Not only does a reflective surface help to deliver more light to the garden, it also helps to even out distribution, since the light is then directed towards the garden from more than one direction.

Perhaps if the light were raised another foot, the very intense light at the center would be dispersed a little, and the peripheral light would be reflected back to the garden.

The test was done using a single stationary light. When more than one light is used, the spaces which are on the periphery of a single light system receive light from more than one light source, increasing the total. The total amount of light that different areas receive becomes more uniform with the use of groups of stationary lights. In a large system, light emitted at a sharp angle to the source eventually reaches the garden and adds to the total received.

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The amount of light the garden receives may very well be higher

continued on page 84

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## FRANK ZAPPA

continued from page 37

Down." The same song was a big hit in Germany. They don't have problems over there with what I say and what I do. But for some reason, in this country, somebody has said, "We can't let this man on the radio." What could happen if you play my records on the radio? Something terrible?

HT: People get AIDS...

FZ: The second time I did a CNN show called *Cross Fire*, the debate topic was "Does Rock Music Cause AIDS?" I was debating Rev. Jeff Ling of the PMRC. Their logic was this. Rock music makes people want to have sex, and sex gives you AIDS. Pretty thin, huh? They set up the question and I just said, "No." There was a big silence, then they had to figure out what to do with the other 29 minutes of the show. I haven't been invited back since.

HT: Why do you think they're not playing your records?

FZ: Somebody up there doesn't like me.

HT: Which somebody?

FZ: Well, I don't think it matters as long as there is such a thing as a somebody. We know that there is a somebody, and if he were elected, maybe we could do something about this somebody. But the problem is that the government of the United States is not exactly what really governs the United States. And this is true in other countries, too. I think that the life of the people is in the hands of those who own raw materials and those who own manufacturing. They make deals with elected representatives to carry out merchandising programs on their behalf. It's almost like the politicians are a form of entertainment that allows people to get into pseudo-debates over pseudo-issues, while behind the scenes you have guys with billions and trillions of dollars moving weapons around, moving sugar around, moving cotton, soy beans, machinery, electronics, all this stuff. The world is a business. And the sooner we start looking at the world as a business, the easier it's going to be for us to live in the world.

HT: How have you managed to keep your integrity while becoming a successful businessman?

FZ: It's really easy. All you have to do is decide you don't want to be one of those guys. You don't make as much money, but you can certainly live well enough.

HT: It's a bizarre thing--you ask kids what they want to be when they grow up, or what they want to do, and their answer is, "I want to make money." In a survey among high school students, more kids said Donald Trump was their hero than anybody else.

FZ: Yeah, but on the other hand, let's

deal with it as a fact of life in America. I think that's a very good indicator of the failure of US education. Now if you add these two facts together, Donald Trump is the idol of American teens, and that teens can't read, write, or do arithmetic, what do we have?

HT: What?

FZ: A failure to communicate.

HT: Your dad wasn't very supportive of your career, was he?

FZ: That would be a very nice way of putting it. He wanted me to be an engineer or go into something real. I could have been a chemist, that would have been okay. An engineer would have been okay. Mostly he wanted me to be an engineer. So I became sort of an engineer. I became a social engineer.

HT: Did you finally resolve some of these issues with him before he passed away?

FZ: No. But I didn't feel they needed to be resolved. The way I look at it,



LYNN GOLDSMITH

people are people. You can let the way they behave affect you, or you can look at it as an innocent bystander--I hereby observe your behavior. I think that it's a little bit easier to get through life if you take that approach. If the behavior is appealing to you, you will participate in it. If it's not, you will avoid it. If the behavior is threatening to you, you will defend yourself. But observe the behavior; stand back and make a decision, but don't let it mutilate you.

HT: Let's dispel the myth that you've been on drugs all this time and that's the only way that you could possibly make your albums.

FZ: People presume that drugs actually give social benefit to them. I've said this for years; drugs are bad for you, don't use them. You want to commit suicide? Go ahead. It's your business. So long as you don't interfere with my life, don't drive your car into me, don't

come after me with a stick. As the planet gets more crowded I think we have to examine how far we will go to accommodate the way other people live and which personal freedoms we're going to be willing to give up in order to control the way other people live. I think we have to make a serious analysis of this problem. I'm not a dope fiend. I do what I do because it comes out of my imagination. The human body is, in fact, a chemical factory. My behavior, and the way I think, is the result of the chemicals that go into my body. These chemicals include coffee, cigarette smoke, and peanut butter. Now, if you think I'm weird, and you want to be weird, too, then drink coffee, smoke cigarettes, and eat peanut butter.

I encountered another variation of that on the *Today Show*, with Jane Pauley. I don't know whether she intended to make it come out that way, but it was like, you play the guitar, how could you be a good father? As if the two concepts are mutually exclusive. And I reminded her I had just come from Spain, where you get respect if you play the guitar. In the United States, if you play a guitar you're doing the work of the devil. Or you're Public Enemy No. 1. Something's wrong here. And to actually have it verbalized that way on network television! You know, "You play the guitar and still you have these nice children." I had to jump up and down about that.

HT: What do you think about how drugs are integrating into society and where they're coming from?

FZ: Think of it this way--you know where pot comes from, right? It comes from the ground. Did it ever occur to you that designer drugs are not things that just come springing out of the ground? They're not natural. Some scientist had to build them. The construction of these designer drugs requires sophisticated equipment. Now the guy who's growing marijuana, or the cocaine rancher in South America, he's not a scientist. He's a businessman-farmer combination. All these weird new chemicals come from professional places. It probably wasn't just a little hobby that started in the laboratory because you don't get to use the laboratory whenever you want. Somebody said, "Make me this. Make me XTC, make me PCP, make me LSD. Here is your contract, here is the money, hire the people, invent this drug. Deliver it to me on this date. If you can, we will then do experiments." The experiments to find out what these chemicals will do to human beings can't be conducted on goats and sheep. You have to do the experiments on people. Unfortunately, in America you have a society that contains a large number of people who are willing to take part in

continued on page 87

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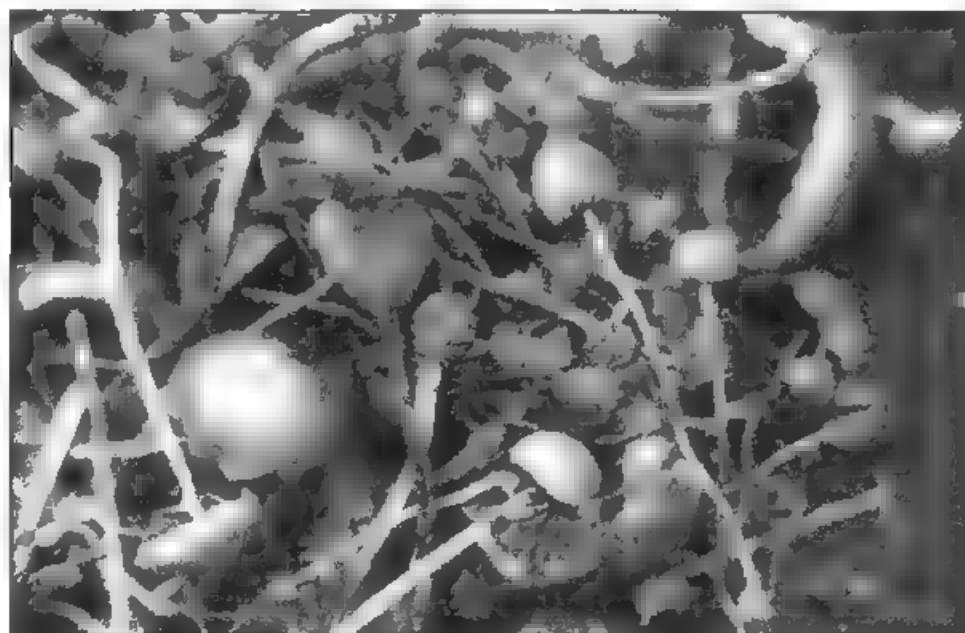
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continued from page 40

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For additional references and reading on the subject of sclerotia, see the following books and journals.

*The Mushroom Culture, The Journal of Mushroom Cultivation* (published by FMRC), issues #2, #3, #6, #11, #12

Garraway, M.O. and R.C. Evans, *Fungal Nutrition and Physiology*  
*The MERCK Index*

Ott, J. and J. Bigwood, *Hallucinogenic Mushrooms of North America*.

*Fruit of the Gods*, VHS video published by FMRC

Benedict, R.G., L.R. Brady, A.H. Smith and V.E. Tyler, "Occurrence (sic) of psilocybin and psilocin in certain Conocybe and Psilocybe species," *Lloydia* 25: 156-159, 1962.

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Hofmann, A., "Teonanacatl and Ololugui, two ancient magic drugs of Mexico," *Bulletin on Narcotics* 23: 3-14, 1971.

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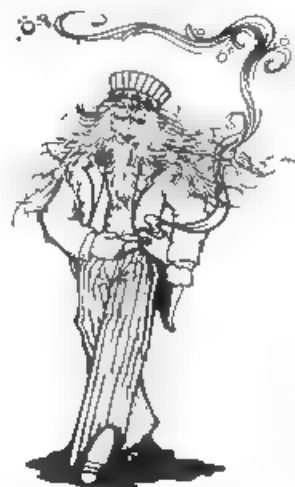
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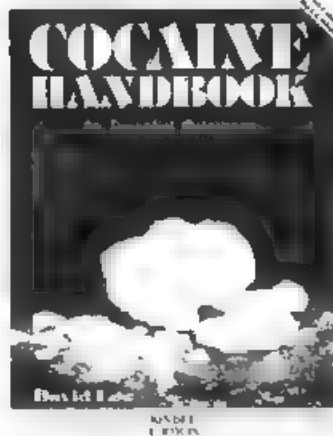
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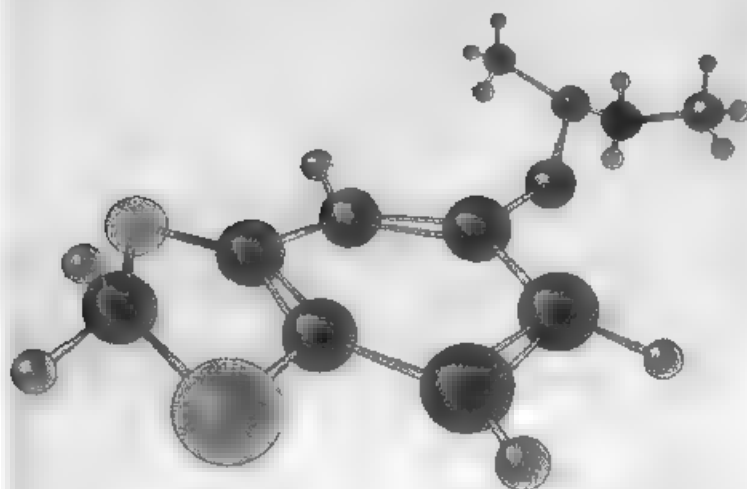
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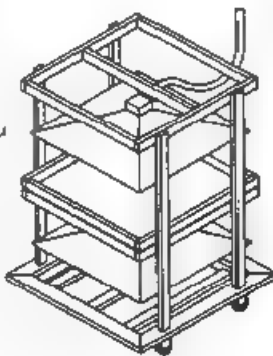
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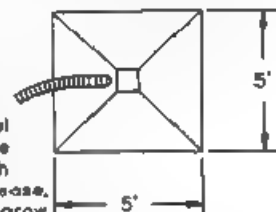


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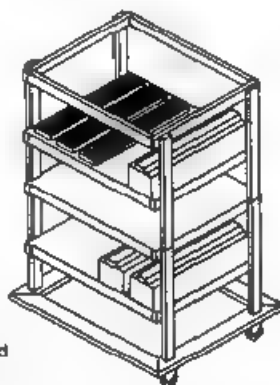
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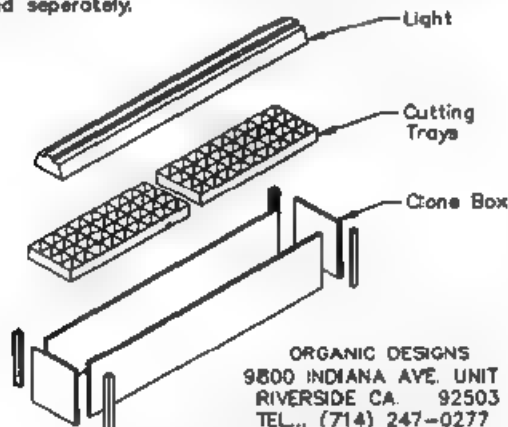
This particular table has four levels. Each level having 24 square feet, all four levels totaling 96 square feet. Each 24 square foot level will hold 432 clones, or seedlings, in two inch cubes. All four levels totaling 1728 plants sexing, dwarfing, and designing to perfect height and size, for Flowering Tables. This process takes three weeks total, under fluorescent lights. Now! you probably won't need four levels like this particular model. We are trying to give you an idea how many seedlings, or clones, you can start and design, in a 4' deep, 6' wide, 7'-8" high area. When placing your order for Dwarfing Table kits, just specify how many flowering lights you will be using. You may purchase step by step plans on how to build your own Flowering and Dwarfing Tables, with exploded views and instructions. Since these tables are made of wood and covered with white plastic, we felt it would be cheaper, and easier, for you the public to be able to order hardware kits without wood, or hardware kits with precut wood.



Dwarfing & Cloning Table

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ORGANIC DESIGNS is proud to present a CLONE SYSTEM with a 100% success rate. This system is fully automatic and capable of cloning 72 growing tips in one week or 72 flowered tips in two weeks, per box. Once you have purchased ORGANIC DESIGNS Cloning Kit, you can add up to 23 more boxes. The Clone Kit comes with everything you will need including light. Extra boxes with lights can be purchased separately.



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STEP-BY-STEP PLANS on how to build your own Flowering Tables, Easy To Follow Exploded Views and instructions 10.99 or FREE with kit purchase. Book on HOW TO GROW maximum weight per sq. ft. from start to finish, Cloning, Dwarfing, Sexing and Suspended Permutation Techniques. This book is unlike any other book you will ever read. It will save you YEARS of hardships. Dealing with Nature is an Art. Book price ... 29.95

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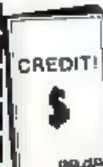


Ed Hassle and the Freedom Fighters declare 1990 the **Year to Petition!** The January issue kicks off this effort with a letter to President Bush that all HIGH TIMES readers should sign and mail to the White House. **The Year in Review** includes a roundup of all the great cannabis protests held in 1989, as well as a look back at major countercultural events, including the Woodstock Reunion and the National Rainbow Family Gathering. For those interested in the origins of '60s radical politics, **The Dutch Provos** by Teun Voeten traces the beginnings of the legalization movement, which began in Holland in 1963. **Can We Save this Garden?** by Ed Rosenthal takes the readers into an indoor operation where everything possible went wrong. As usual, the Guru of Ganja provides helpful tips on correcting the problems. In **Divine Smoke and God's Flesh**, Peter Gorman is sent on another psychedelic quest--this time to New York's East Village to investigate a new church whose members experiment with a powerful, legal hallucinogen. **PLUS--** Chef Ra goes looking for the Ultimate Hash Brownie.

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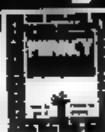
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continued from page 73

than the results in Jorge's experiment. It is probably also disbursed more evenly. Using the horizontal light there were 32 sq. ft. lit with a minimum 1000 lumens. Most books recommend one lamp for 50 sq. ft. With light from the periphery, reflected back to the space more than 50 sq. ft. may meet that minimum.

Most books recommend using a 400 watt lamp for no more than 20 sq. ft., an area a little smaller than 5' x 5'. With reflective material on the walls almost the entire area will meet the minimum.

**RIGHT LIGHT FOR TINY SPOT**

I am planning to use a section of my closet for growing. The space is 18" square and a few feet high. I was going to use a circular fluorescent tube or a small wattage high pressure sodium (HPS) lamp. What should I do?

--Aspiring Grower  
Isia Vista, CA

The space is a total of 2 1/4 square feet. Three of four circular fluorescent tubes would keep the area well lit. Each tube uses about 22 watts. They are easy to install since they screw in to ordinary incandescent sockets.

A 40 or 70 watt HPS lamp would provide the plants more light. These lamps are available from patio shops and discount centers and usually come with a built in ballast. They are also very easy to install.

**LIMITED POLLINATION**

Is it possible to pollinate a single bud without effecting the rest of the plant?

Allen  
Marietta, GA

Yes. Using a small watercolor brush, the pollen can be painted on a single bud. Only that bud will develop a seed, leaving the rest of the plant as sinsemilla.

• I welcome comments, tips, and questions regarding marijuana and marijuana cultivation. Send all letters to Ask Ed, HIGH TIMES, 211 E. 43rd St., New York, NY 10017. Also send entries for the Bud, Plant, and Garden of the Month Contests. All correspondents whose letters or photos are used will receive a free copy of my book *Marijuana Growers Handbook, Indoor/Greenhouse Edition*.

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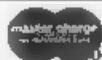
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HP68



# FRANK ZAPPA

continued from page 75

these experiments. They actually pay to take these chemicals that have been created for some unknown purpose. I think that before you stick a chemical in your body, you should think about where it came from and who's really getting the benefit.

**HT:** In your book you came up with this great thing on AIDS and how it was probably missionaries sticking people with unsanitized needles....

**FZ:** That's not my theory. I heard that from somebody else. The first I heard about AIDS was a news story which said that suddenly 700 people of a certain persuasion in a certain city had died in the month of November. Does that sound like any other epidemic you ever heard of before? An awful lot like Legionnaire's Disease, huh? Suddenly, a certain group of people in a certain place come down with a certain disease. Since I had grown up in a household where I knew about poison gas and germ warfare, it immediately sounded like an experiment to me, using civilians for testing. It's not farfetched to think of it that way because there have been plenty of other examples that have been reported in national media about when the government has used private citizens for testing against their will, including people who went into the Army, were given LSD, and not told that they were part of an experiment. In a hospital in Canada, some patients were used for testing by the CIA. It wasn't widely reported in the US, but they certainly know about it in Canada. And the CIA got caught doing it.

Then there was the experiment that took place in Grand Central Station in New York City, where a gas was emitted to find out what kind of panic would take place. Let's say you're a US citizen. You have certain rights, okay? I don't think you have the obligation to participate unwillingly in chemical and biological warfare experiments in your hometown. I don't think that that's part of your obligation as a US citizen. If you want to volunteer for it, terrific. If you want to take guys on Death Row and use them to test this stuff, even better. But to say, "Well, we'll just go to the train station, we'll turn on the gas, and we'll see what happens...," what is that? What kind of country does that stuff?

**HT:** But how do you get people aware of these things?

**FZ:** You keep talking about it and maybe one or two people who hear it are willing to talk about it to somebody else, and you hope it spreads that way. I don't think you can expect more than that. There are no miracles here. ●

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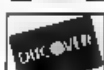
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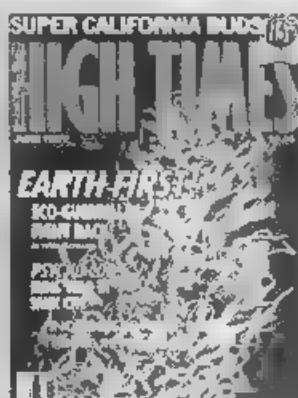
Every year, we try to do something special for you readers in our Special Anniversary Issue. Here's what we've done in years past.



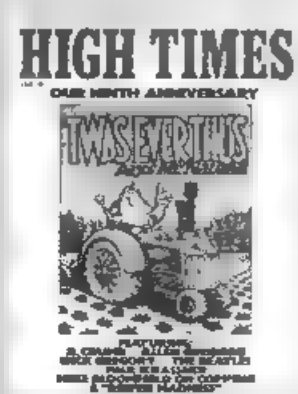
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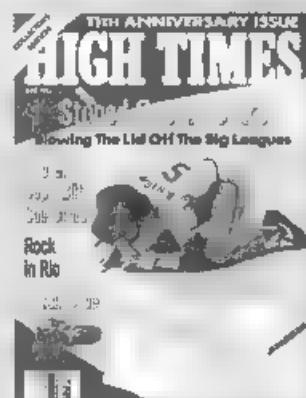
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THE ULTIMATE

DECEMBER 1989

# MONSTER MAGAZINE

THE  
TOP  
500

by John Holmstrom

ONE LOVE  
IN THE USA

by M. Peggy Quattro

RIDIN' THE  
PEACE TRAIN  
TO FORGOTONIA

by Chef Ra

FOX IS A DOG

by Mike Edison



# REGGAE REPORT

by M. PEGGY QUATRO



COURTESY OF REGGAE REPORT

## Reggae superstar Jimmy Cliff.

Whereas only two years ago it would have been a virtual impossibility to hear reggae on a national television commercial, nowadays it's an everyday occurrence. Madison Avenue types have realized that there really is something captivating about this music. One of the first to go national was Clorox in 1987, which, as a result, won an ADDY Award (the Grammy of the advertising world) for its "catchy" Clorox II commercial. Today you can hear Volkswagen, Certs, Coors, Publix Markets, The Hair Cuttery, Colgate toothpaste, HBO, and many more utilizing the infectious rhythm. We've come a long way, baby.

Much to my dismay, none of this actually benefits the Jamaican originators of the music. Outside of Jamaica's internationally known **Sly Dunbar** and **Robbie Shakespeare**, not many Jamaican musicians or writers are earning their fair share of the pie. It has only been recently that the popular dance hall deejay **Lt. Stitchie** and the dreadlocked vocalist **Zylan** were seen and heard via satellite television singing the praises of Red Stripe Beer.

More of this commercial appeal would help offset the negative image of Jamaicans or dreadlocks presented in American television news and programs. Those who know, i.e., the fans, do not appreciate or accept the notion that one or the other is "bad." The whole idea contradicts the

message in the music. I'm not saying that there are no bad Jamaicans or dreadlocks, but I am saying that there are good ones, and talented ones, and because of the upswing towards reggae their talents should be appreciated and utilized.

Major American record labels have finally come around to reggae. Stalwarts **Jimmy Cliff** and **Third World**, both signed to CBS Records in the early '80s, are now enjoying "second comings" with new and interested labels. Polygram in New York is actively supporting the new Third World album *Serious Business* and Jimmy Cliff recently signed with Vision Records in Miami to release his latest album effort *Images* in August. MCA Records has signed **Steel Pulse**, Elektra has reggae rapper **Shinehead**, Atlantic has a double bill with **The Wailers** and **Lt. Stitchie**, while Virgin has released the second **Ziggy Marley and the Melody Makers** album *One Bright Day* as a follow-up to last year's Grammy Award winner *Conscious Party*. **UB40**, the Birmingham-based band who enjoyed a number one song in 1988 with "Red Red Wine," is signed to A&M, as well as the sensational **Neville Brothers**, who interpret and perform reggae beautifully in the r-soulful New Orleans style. African reggae star **Alpha Blondy** has a new long-awaited album out on Capitol, former home to the late great **Peter Tosh**. English sensation

**Pato Banton** has a superb album on IRS Records and songbird **JC Lodge** is enjoying chart success with *Telephone Love* on Pow Wow. The "granddaddy" of them all, Island Records, has a whole list of new artists and releases that include **Aswad**, **Donovan Foundation**, **Earth Messengers**, and the latest hip hop reggae by **Sly** and **Robbie** with American rapper **KRS-One**. Other labels with a steady flow of releases but more subdued in their promotion are Shanachie, RAS and Heartbeat. Smaller labels, independents if you will, such as Rohit, Gyasi, Andy's, Witty's and Wackie's regularly turn out fresh new sounds straight from Yard.

The influence from roots rock Jamaica is felt worldwide. Nearly every nation, including the USSR, has a reggae representative band or group. The USA has several, home grown or at least US-based reggae acts who tour regularly. Filling in the long gaps between "big names" are groups like **Killer Bees**, **Freedom of Expression**, **The Amateurs**, **Swaamp Band**, and **Olu and Crown of Honor**, to name a few.

The biggest job yet to accomplish, the final frontier, is getting reggae played on the radio. I mean commercial AOR (Album Oriented Rock), Urban Contemporary (R&B) and Top 40 radio heard by millions on a daily basis. Give thanks to all the college radio stations and disc jockeys who faithfully and consistently program and play the music. Also to all the public radio and community radio stations nationwide who have been active supporters of reggae for more than just this decade. If you are asking yourself what you can do to help, may I say, write your request. Write or call your local stations and demand that they play reggae music. If it's due to their own ignorance that they don't know what to play then suggest they contact the labels themselves, or other reggae deejays, or pertinent reggae magazines who keep abreast of the latest and best reggae releases. There are experts there ready willing and able to help.

The reggae network in the USA grows everyday. From New England to the Arizona desert. From the Pacific Northwest to the tropical Southeast, reggae fans are emerging. Record store chains such as Tower, Record Bar, Peaches, Turtles, and Sam Goody who always "go with the flow" are stocking up on available releases to meet the demand. Just take a look around Sunsplash in Montego Bay or the Sunsplash USA tours, or the many concerts and tours involving not only major names but also abundant local talent and you'll see the old and new reggae fans. One way of judging who is who is to check out the "skanking" going on. Growing from only a few hundred "skankers" in the early '80s to tens of thousands in 1989, reggae fans have discovered and embraced living One Love in the USA. ●

M. Peggy Quatro is Publisher and Editor of *REGGAE REPORT*, the world's leading reggae magazine, based in Miami, Florida.

# SHOOT THE TUBE

by MIKE EDISON



"And then comes a lion who's partly a trout!  
Then more stuff!"

For forty-five minutes about!"

Dr. Seuss,

If I Ran The Circus

Last night I fucked Kelly Bundy. Yeah, in my dreams, man, but now that I have your attention let's get right to the meat of the matter and start making fun of the crippe that just moved into the neighborhood: the Fox Network.

Watching *The Gary Shandling Show* is like drinking diarrhea. Let's face it, aside from *Married... With Children*, the only good shows they've got are *America's Most Wanted* and *Cops*, the latter being one of the most poetically and sociologically offensive shows ever to rape the airwaves. Of course it's also extremely entertaining, but it sets a very harsh tone wantonly abusing and exploiting drug users and tells us just a little bit more than we want to know about the vitriolic times in which we live.

Both shows are most likely guilty of civil rights violations. Remember, if you will, that in this country, people are presumed innocent until proven guilty. *America's Most Wanted* is remarkable only because it works. Where else on TV are you going to see such brilliant dramatizations of cold-blooded murder and rape? All of the cases are still open and viewers are invited to call in and narc on the bad guys. It's a great hook and besides, the bad guys are really bad—they're alleged murderers.

Meanwhile, the crew of *Cops* routinely goes around filming real policemen (not necessarily real "men") busting real people, more often than not in a glorified blur of wild west violence magnified by the fever that comes whenever there are TV cameras around. How would you like it if this crack team of law-enforcement cowboys and video rangers came to terrorize your neighborhood? It's a dangerous precedent taping arrests and showing them during prime time, romanticizes scumbag cops and sets a horrific example for impressionable young viewers. So what if it's entertaining? Fox should be ashamed of themselves.

(Phil Gonzalez, the publicist for *Cops* in L.A., told me that "everyone whose face is shown has signed a release." Those who haven't are "digitized" or have their faces obscured. He says that most people are willing to sign releases because "they believe they are innocent," and that the show has had no problems with anyone who has ever been shown. We'll see. Today I called the A.C.L.U. and they're looking into it for me. I'll let you know.)

The rest of the Fox line-up is a shameless pander to yuppies, except for *Totally Hidden Video* which is so totally

unoriginal, unfunny and insulting that I won't even let my dog watch it. So, despite the highly lauded but much overrated Fox network, now that baseball season is over tolerable broadcast television has dropped to its winter low. So what do you watch when you watch? The staples: *The Honeymooners*, *Star Trek*, *Hawaii Five-O*, pro-wrestling (the topic of a future column), old movies, stuff like that. The easy way out of course is to use the ol' VCR, but where's the challenge in that? Lester Bangs once penned a fantasy about guerilla cathode-ray addicts taking over a TV studio and showing nothing but twisted science fiction and biker movies. A real people's rebellion. Beautiful.

Sometimes I think about starting my own network, a global communications empire to produce and broadcast the most shocking, outrageous, perverse and psychedelic bonanza of bestiality ever to cram rabbit ears and satellite dishes across the

globe. No, really I think about this all the time. But I'm gonna settle for a gimmick glommed from *Mad* magazine and use it as a cheap ploy to solicit reader mail.

**Scenes We'd Like to See**  
(*Married... With Children*):

During a slumber party (big T&A scene natch), Kelly accidentally swallows the bong while demonstrating her "deep throat technique" to her less experienced friends. Bud Bundy gets busted for peddling loose joints in school—or maybe he gets collared playing with himself while peeping through the window of the girl's shower sort of like the Self-Taught Man in Sartre's *Nausea*, the existentialist introvert who, while attempting to read every book in the library from A to Z was caught whacking it in the research room and was banished for life. Al and Steve swap wives.

Get the idea? 'Course you don't have to limit yourselves to Bundy-vision. Maybe one of Cosby's kids comes home one day in a dashiki spouting an anti-Semitic Farrakhan rap and Mr. Huxtable is forced to kill him. Anyhooze, send in your ideas c/o *Shoot The Tube* and look for the best ones in an upcoming issue. The winners will get a free one-year subscription. Next month: *Batman vs. The Green Hornet*. Stay tuned. ●



**Christina Applegate plays teenage sex symbol Kelly Bundy on *Married... With Children*.**



# RASTA RECIPES

by CHEF RA



Today we are goin' to take the "party" around the world. All the kids on Chef Ra's "Peace Train" are gonna "Rock the House" right in your own neighborhood. Like Noah and all the animals on the ark—sit back, relax, fire up some spiffs, put on a pot of Rasta Pasta and watch Babylon go to fuckin' hell! Every day we read the paper and watch the news about some war or somebody tryin' out a new automatic weapon on somebody's ass. Well, enough's enough, 'cause when you eat the Rasta Pasta it will help turn your mind around. The reason why Babylon (Babylon is the corrupt evil society of the world which exploits men and women alike) has so much fussing and fightin' is because the people of ol' Babylon never want to "cross the line." Everyone in Babylon is secure in "their own place" and unwilling or maybe just downright scared to check out someone else's culture or festytle.

Chef Ra's Cultural Revolutionary Movement is founded on the principle of crossing every "line," and smashing every "wall." I like to call it, "Dreamscaping into Forgottonia with Chef Ra!" Forgottonia runs parallel to this world. It's like the *Twilight Zone* for freaky-minded folks! It's a place frozen in "real" time, rooted in history but touched by the present with a lesson for the future. The people of Forgottonia respect the beauty of life in a simple way and they offer

no complication. You can sit down and rap and get their point of view. A few weeks ago I was sittin' at O'Hare airport waitin' to board a "big iron bird." All of a sudden, a brother who was operating a shoe shine booth sat down beside me, he gave me a real funny look and then he said "Man, look at these motherfucks walking thru the terminal, you got the yuppies, poor folks, and even rich sons-of-bitches, and look down at their feet man--not one motherfucker wearin' leather shoes, they all wearin' them high-top tennis shoes! How's a shine man gonna make a livin' nowadays?" I guess I never sat down and noticed that before, and he had me laughing for a half hour. I counted two pairs of leather shoes before I split, and they were on enlisted army dudes! He was caught in Forgottonia but he will survive and live on maybe by selling "fuckin' tennis shoes."

Another time I decided I was gonna make a "Peace Train" out of Amtrak's famous "Broadway Limited" train between Chicago and New York. I boarded the train on Sunday night at 8:00 PM and I guess you have to know the tricks of the trade because they closed the club car lounge 45 minutes into the trip. Now everyone knows Chef Ra has to have some skunk bud and a few barley pops to smooth them bumpy rails! But what was I to do when the conductor said, "Sorry, the club car is closed to service for the night?" So I sat there smoking

nothing and drinking a Diet Pepsi, a "just say no" nightmare rollin' through the mid-western darkness. All of a sudden, six folks came into the club car. They all looked pretty straight except a "heavy-metal dude" with a "Guns N' Roses" t-shirt on. Soon they all were playing cards and the metal dude's girlfriend began tellin' nasty jokes that kind of loosened the club car atmosphere. And people began to talk to folks they didn't know. All of a sudden the metal dude goes "Hey, I've seen you before man, I just can't place you," lookin' over at me. I said, "Well I'm Chef Ra of HIGH TIMES." Then he asked "you got any of that fine skunk bud you been cookin' with?" I replied, "Is the Pope Catholic?" So I busted out my bag and my special Amtrak-approved one-hitter! We started smokin', and one of the other guys had two fifths of Seagram-7. We all started sharin', laughin' and partyin' and generally getting super fucked up! I never had seen these folks before in my life but we got to be real close in a short period of time. The conductor of the train kept tryin' to catch us smokin' 'cause he knew we were havin' too good of a time. The girl who was tellin' the nasty jokes went "way-wild" and did a strip-tease on the club car table then proceeded to give blow jobs to anybody who wanted one! Too wild for Chef Ra! (I'm not into wild random sexual encounters so took a pass on the blow job.) But it can be so wild in Forgottonia on the train! The conductor wanted to throw my "wild child" girl off the train outside of Pittsburgh, when she jumped a "nerd" for a kiss in the diner's car and he freaked-out and dropped his Wheaties in his lap! Chef Ra says, "I love Forgottonia, everyone should come!"

## CHEF RA'S "FRY YOUR MIND" FRIED RICE

30 medium-sized fresh shrimp  
1 bunch fresh scallions (chopped)  
1 cup fresh basil (chopped) (1 tablespoon of dry basil if you can't find fresh)  
6 cloves of fresh garlic  
1 cup of bean sprouts  
1 tablespoon chopped ginger root (or dry ginger powder)  
1/4 oz. of fine skunk bud  
2 cups of cooked rice (let rice sit covered in fridge for two days)  
4 tablespoons of sesame seed oil  
2 eggs (scrambled)  
1 cup of mushrooms

Take two tablespoons of oil, add sinsi, chopped, and heat in a double-boiler system until the oil and herb are hot, for about 15 minutes. Set sesame-sinsi oil aside. Put 2 tablespoons of sesame oil in pan and add scallions, garlic, bean sprouts, mushrooms, basil, ginger root and cook stir-fry style for a few minutes. Add eggs, then shrimp, into the pan and continue to stir-fry. Then add the cooked rice and sesame-sinsi oil and heat until done--about 3 minutes! Eat this and get on the Real Peace Train! ●



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IT - I MAKE  
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RIGHT!



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F R E E T H E W E E D

# PSYCHOTIC REACTION

by STEVEN HAGER



There's a new bad boy making the rounds at the film festivals this year and his name is John McNaughton. Having directed and co-wrote what *the Village Voice* has already dubbed "the film of the year," you'd think he'd be welcomed with open arms by the Hollywood establishment. Think again. Even though his first feature, *Henry*, was completed over three years ago and is probably the most frightening film ever made, it has yet to receive a theatrical release--although it is currently available at many video rental stores. And even though it's obvious to anyone who sees the film that McNaughton is one of the most talented young directors in America, he's had nothing but headaches getting his films made and distributed so far.

Maybe all this has something to do with the fact that *Henry* was independently made for \$100,000. On this remarkably meager budget, the film looks better than most films coming out of Hollywood, where the average cost of a film hovers around \$6 million these days. I guess the industry doesn't like being shown up for the incredible waste of money it really is.

Of course, *Henry* is not an easy film to watch. Most women I know who've seen it complain of having nightmares for weeks. The script is loosely based on the life of Henry Lee Lucas, a serial murderer from Texas who admitted killing more than 300 victims. Even so, *Henry* is far from a typical slasher film. It opens with three graphic gore scenes and then quickly switches

gear with an almost cinema verite reenactment of a few weeks in Henry's life. Much of the credit for this realism is due to McNaughton and Richard Fire's script, which delves into Henry's motivations as if he were a character in a Greek tragedy. However, it's Michael Rooker's disturbing portrayal of the lead character that really makes this film click. Never has the murderous mind seemed so frighteningly real and believable. After watching the film, you become afraid of the human race. Check your local video store and see if they have it. If not, tell them it's released by MPI of Oak Forest, Illinois, and make sure they order a copy.

By the time you read this, McNaughton's second feature, *The Borrower*, should be appearing in the theaters, provided, of course, it doesn't get derailed by the censors (which is what happened to *Henry*). Although I haven't seen it, I've read the very funny script. It's about an alien who visits Earth and "borrows" heads to stay alive. HIGH TIMES readers will be interested to know that Rae Dawn Chong, daughter of Tommy Chong (who appeared on our June '89 cover) stars as a policewoman investigating why all these headless corpses are suddenly turning up around L.A. Unfortunately, the film was yanked out of McNaughton's hands just as the editing was being completed, and no one seems to know when it will be released.

*Insect creature created for The Borrower by Kevin Yagher.*



*Michael "Henry" Rooker with director John McNaughton.*



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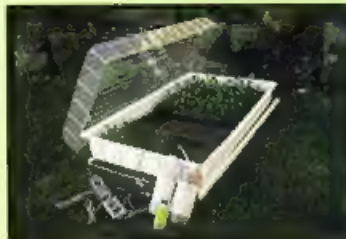
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Hello, my name is Jeffery DeMarco, President and Founder of Pyraponic Industries Inc. II. My master's thesis concerned the cannabinoid profile of marijuana. The knowledge gained through this research and experimentation can now be applied to the growing of any herbaceous plant from mint and basil, to roses and tobacco.

In pursuit of this master's thesis, I first had to generate the most extensive nonacademic library on the subject. Second, I assembled the most extensive scientific bibliography ever created. Then, I went into the laboratory at a major university while under federal license, and designed the most sophisticated laboratory grade growing chamber in the world called the PHOTOTRON™ and the methodology "Growing Plants Pyraponimetrically".

The Phototron™ is not presented to the public as a piece of paraphernalia intended for the unlawful production of marijuana. The system was designed to grow any plant. The private cultivation of marijuana has been illegal under numerous state and federal laws since 1936. Marijuana can only be grown legally with a federal license. I worked under such a license at the time I was engaged in my research. Pyraponic Industries Inc. II will never knowingly sell products to anyone expressing the intent to produce illicit substances. If you were to research indoor plant growing techniques, as I did, a similarity soon becomes apparent. Every system before the Phototron™ has attempted to duplicate a tropical climate, such as Hawaii's, in a confined area. I suggest that when you finally achieve the re-creation of Hawaii, you can do no better than Hawaii's results.

In fact you will grow the plant six to nine months, with an average six (6) inch internodal length (the distance between fruiting sites). That will produce a fruiting ratio at the tops of the plant equal to only ten percent (10%). Ninety percent (90%) of the plant material is unusable, and the plants are killed off after harvest in preparation for planting the next crop.

Number one, the only thing I am waiting nine months for is a baby. Number two, I don't want a tree in my home. Number three, I am not going to pay the electric bill to artificially reproduce the sun. That is why I made my system so revolutionary. The Phototron™ measures only 39 inches tall by 20½ inches wide. Its potential is deceptively masked by the simplicity of functional design and compact size.

On average, the Phototron™ draws only \$4.00 per month in electricity. I guarantee you will grow six (6) plants, three (3) feet tall in forty-five days, while maintaining a 1 inch internodal length. I guarantee that in your Phototron™ each of your six plants will produce over one thousand fruiting sites from top to bottom. Mine is the only system in the world which will allow you to reflower and reutilize the same plants every forty-five days. You will remove from the system everyday. Beginning on DAY 20 after seed germination, an average of six to eight ounces of plant material, such as tobacco, can be harvested every forty-five days.

Please, do not allow the technical sounding nature of the Phototron™ to scare you away. I personally service back and guarantee each unit sold. The instructions are clear and simple; the system comes to you complete. All you must do is select your seeds, plug in the system and water it routinely. Then, if you have any questions, you may call me directly. Ask your question. Get your answer.

You can not fall with my Phototron™. I do not allow any of my Phototrons™ to fall below showcase. I personally have guaranteed every Phototron™ ever sold, and I have never had one returned, ever, and I'm not starting now.

Call me at 1-619-451-BUDS. If you do not learn more about plant production than you have ever learned before, I will pay you for the call. Can you afford not to call?

Jeffery Julian DeMarco.



PHOTOTRON	NONE	12	YES	YES	YES	YES	YES	YES	YES	YES
HALIDE SYSTEMS	50%	1	NO	NO	NO	NO	NO	NO	NO	NO
DAY 20	<p>ORDER YOUR "GROWING PLANTS" BROCHURE TODAY! SEND \$3.00 U.S. CURRENCY TO: PYRAPONIC INDUSTRIES INTERNATIONAL LTD. P.O. BOX 231, WEMBLEY, MIDDLESEX HA9 6EL, UK.</p>									
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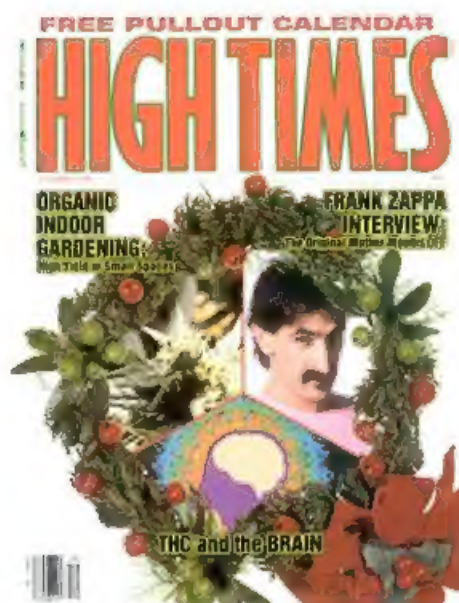
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